(19) World Intellectual Property Organization International Bureau



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A

(54) Title: HUMAN SECRETED PROTEINS

(57) Abstract: The present invention relates to human secreted polypeptides, and isolated nucleic acid molecules encoding said polypeptides, useful for diagnosing and treating hematopoietic and hematologic diseases, disorders, and/or conditions related thereto. Antibodies that bind these polypeptides are also encompassed by the present invention. Also encompassed by the invention are vectors, host cells, and recombinant and synthetic methods for producing said polynucleotides, polypeptides, and/or antibodies. The invention further encompasses screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further encompasses methods and compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

VO 03/038063

INTERNATIONAL SEARCH REPORT

International application No. PCT/US02/08277

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cording to	550/350; 536/23.1 International Patent Classification (IPC) or to both national classification and IPC	
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	590/950; 536/23.1	
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	TO DE DEI EVANT	
DOC	UMENTS CONSIDERED TO BE RELEVANT	Relevant to claim No.
ategory*	Citation of document, with indication, where appropriate, of the relevant passages	
ζ	US 6,174,994 B1 (ELSHOURBAGY et al.) 16 January 2001 (16.01.2001), see the entire document.	1-4, 13-18
ζ.	US 5,858,716 A (ELSHOURBAGY et al.) 12 January 1999 (12.01.1999), see the entire document.	1-4, 13-18
	,	
	rther documents are listed in the continuation of Box C. See patent family annex.	
	later document published after the i	nternational filing date or priority
	the principle or theory underlying	rue magnemen
	to be of particular relevance; to be of particular relevance;	the claimed invention cannot be idered to involve an inventive step
	earner documents parameter claims or which is	
	decument which may throw downs on priority claim(s) or when a special costablish the publication date of another citation or other special relevance; considered to involve an inventive segment referring to an eral disclosure, use, exhibition or other with one or more other such do obvious to 2 person skilled in the	cuments, such combination bein
"O"	decument referring to 11 that the international filing date but later "6" document member of the same part	
Date of t	than the priority date claimed Date of mailing of the international	search report
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Commi	d mailing address of the ISA/US Authorized officer HOPE ROBINSON	in K
	gton, D.C. 20231 Tolehone No. (703) 308-0196	\lor
Facsimil	e No. (708) 805-8280	

INTERNATIONAL SEARCH REPORT

International application No. PCT/US02/08277

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)						
This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:						
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:						
2. Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:						
5. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).						
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)						
This International Searching Authority found multiple inventions in this international application, as follows:						
Please See Extra Sheet.						
1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.						
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.						
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:						
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-4 and 13-18 (SEQ ID NOS: 11 and 626)						
Remark on Protest The additional search fees were accompanied by the applicant's protest.						
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.						

Form PCT/ISA/210 (continuation of first sheet(1)) (July 1998)*

INTERNATIONAL SEARCH REPORT

International application No. PCT/US02/08277

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING This ISA found multiple inventions as follows:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 18.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Groups 1-615, claim(s) 1-4 and 13-18, all in part, each group directed to a peptide of SEQ ID NO: Y, wherein Y correlates to one of those listed in Table 1A, and corresponds to one of the cDNA Clone IDs, respectively. For examples,

If Group 1 is elected, this correlates to Gene No. 1, cDNA clone ID H2CBU83 of Table 1A, wherein Y is 626.

If Group 2 is elected, this correlates to Gene No. 1, cDNA clone ID H2CBUSS, wherein Y is 1017.

Groups 616-1250, claim(s) 5-6 and 19-20, in part, drawn to an isolated antibody which binds to a protein with SEQ ID NO: Y, wherein Y correlates to one of those listed in Table 1A, and corresponds to one of the cDNA Clone IDs, respectively. For examples,

If Group 145 is elected, this correlates to Gene No. 1, cDNA clone ID H2CBU85 of Table 1A, wherein Y is 626.

If Group 146 is elected, this correlates to Gene No. 1, cDNA clone ID H2CBU83, wherein Y is 1017.

Groups 1231-1845, claim(s) 7-10 and 21-52, all in part, drawn to an isolated nucleic acid of SEQ ID NO: X or a peptide of SEQ ID NO NO: Y, wherein X and Y are values that correlate to those listed in Table 1A, and correspond to one of the cDNA Clone IDs, respectively. For example,

If Group 1 is elected, this correlates to Gene No. 1, cDNA clone ID H2CBU83 of Table 1A, wherein X is 11 and Y is 626.

If Group 2 is elected, this correlates to Gene No. 1, cDNA clone ID H2CBUSS, wherein X is 402 and Y is

Groups 1846-2460, claim(s) 11-12, in part, drawn to an agonist or antagonist of the polypeptide of SEQ ID NO: Y, wherein Y correlates to one of those listed in Table 1A, and corresponds to one of the cDNA Clone IDs, respectively. For examples,

If Group 217 is elected, this correlates to Gene No. 1, cDNA clone ID H2CBU83 of Table 1A, wherein Y is 626.

If Group 218 is elected, this correlates to Gene No. 1, cDNA clone ID H2CBU83, wherein Y is 1017.

The inventions listed as Groups 1-2460 do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The polynucleotides and polypeptides of each invention are unrelated, each to each other. Where, for example, claim 1, items (e) through (f) do not require a polynucleotide of any degree of specificity to a sequence, it is apparent that Birren et al. (2001, Accession No. AC090597) discloses a DNA encoding a polypeptide wherein said DNA renders the claims drawn to the nucleic acid, among the other, not novel, with a sequence identity of 99%. Thus the technical feature of the polynucleotide sequence is not special and the groups are not so linked under PCT Rule 18.1. Additionally the claimed methods produce different products and/or different results which are not coextensive and which do not share the same technical feature.

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PCT/US02/08277 WO 03/038063

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95

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<213> Homo sapiens

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agagataagt awggctkggc atkgattett ytgtkgtwae etcaagetgt tttetagtee
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ccaagaacag caytytcagt gggtgtggaa gtgggcggga catgaagcaa tggttttaca
                                                                    240
                                                                    300
ttgcattgcc tggctacags ttggcatttc tttccttttt cttttcttt gcgtcattgc
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cattggtgcc actaattttg cttcccctyt cttttataaa cttgtttcct cnggagttgc
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<210> 167
<211> 711
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<213> Homo sapiens
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cccagggagt aggggctacc ttgaggggat gatagacctc ccccactccc agtgkkactc
                                                                    180
                                                                    240
tggaaatatg aaggaactag ggagtggaag agatttcaga gctggggaga ggagttcctc
ccttcaaagc cagcaactgc ctttggggaa tgtcgggggg tctctccttt ctcctgcttg
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tgtkargtgg tacacagtcc ccccttcacc tggcgggaag ctgtcccgga cagactcatc
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tcagctttcc cttggggcag gatcgggggc agcagctcca gcagaaacag caggatctgg
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ggragctggg cagcctcttc caggccttcg tgaagaggga gagccaggct tatgcgtaag
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tggtggtaaa gtggagcaat cccttcacgc tccttggcca tgttctgagc ggccagcttg
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<212> DNA
<213> Homo sapiens
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cctactcatg aaaatgttgg ggccatccag gcttccattt ttagccctca ctttgtgcag
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gtttatactt tattttcagt tttgttatct gatctctgac tccagcccag accattcctg
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ccttagactc attatgtgca gacatgaagt catcttttt ctctccagac ctgcttttcc
                                                                    360
tctcgtattc ttctttttgg tgaatggtac aattattcag atggaacgtc caagtcaaaa
                                                                    420
gtcgttctag aatcctccct cactcctaat gccacatcca attagtgacc aaatcctatc
                                                                    480
gattcggcct tctaaataca gtcaaaacat ttcattcaat tcagcgtcac tgtcattgct
                                                                    540
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tgccttccag tcttgtcatc ctactccgca gttaatcccc tgagtgctat cctagtgatc
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cttctaacag tacagatttg gtcatggatt ctccagcttg aaatacttca tgtcttttgt
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gggaacatgg atggagatgg aggctattat acttagcaaa caaatgcatg aacgaaaacc
                                                                    780
                                                                    840
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caaatgaaca gcaaacactg gggtctactt gagggtggag tttgggagga gggagagaag
                                                                    900
                                                                    960
cagaaaaggt aactattggg tactgaactt aatacctggg tgattaaata atctgttcaa
caggececca tgatatgagt ttacetacgt aacaaacett cacatgtate eccaaaceta
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                                                                   1050
aaataaaagt taaaaaaaaa aaaaaaaaaa
<210> 169
<211> 488
<212> DNA
<213> Homo sapiens
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                                                                    120
                                                                    180
catgggagac ctcaaggagg tatgcctgcc ccacagatgc cctggaagga cagcttgctg
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ctcctactca gaaccacacc tgcagacaga ggaggacaga cggacactca tttgctgagc
acccatgtaa catgaactaa gagctgggtg gagacaatga acggtggagc catcgttccc
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gatgtggagg gagaacagct caagaccacg gaacagcctg ctctcccgct tcctggcttc
                                                                    360
                                                                    420
cgtgcgcttt tgtccaatca ggctttttga ccaatcggcc aggcgcgcta tgtaaatttc
480
                                                                    488
aaaaaaaa
<210> 170
<211> 2152
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                                                                    180
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                                                                    240
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ggagcgatcc cacgaaaggc accgtgtgct tctacggcca cttggacgtg cagcctgctg
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accggggcga tgggtggctc acggacccct atgtgctgac ggaggtagac gggaaacttt
                                                                    660
                                                                    720
atggacgagg agcgaccgac aacaaaggcc ctgtcttggc ttggatcaat gctgtgagcg
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tcacttatgg aacccggggg aacagctact tcatggtgga ggtgaaatgc agagaccagg
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tggttcctct tacagaagag gaaataaata catacaaagc catccatcta gacctagaag
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aataccggaa tagcagccgg gttgagaaat ttctgttcga tactaaggag gagattctaa
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tgcacctctg gaggtaccca tctctttcta ttcatgggat cgagggcgcg tttgatgagc
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                                                                    1920
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                                                                    2040
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tcactccgqt ttqctttcta qqtcctcaag tgctcgtgac acataatcat tccatccaat
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                                                                    2152
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<211> 1113
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<213> Homo sapiens
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aatacagtta ttcgtttgca tggttcctaa tgtgcttcac tcaatttagc agaatttttt
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ttttaacctc ttccttgacg ctagctgctt gtgcaaatca catcttggcc gcctactctt
                                                                     180
cttcacttgc tgacagatgt gtaggtgaga aaagtctcat agtcattgtt cctgaaagaa
                                                                     240
gcttccagac ccacttctag ggccagtgac atatgcagga aatcagctgc ttctgggcca
                                                                     300
ggacagagct ggtctttttt ttagtggggg atggcgggca gtggggcang ggacattcaa
                                                                     360
                                                                     420
aatttatttt ccaacagaca gatagcatca gcaggtacaa ctacaagggt atctacatag
atcatacatt cacaaggcat tattagttca acagtgagaa agccactcgt gggttttctg
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taacaatatc ccacttcata gtgtaaacag gtactatttt gttcacttac aattccggaa
                                                                     540
ggaagggcac accttgcagg ggggaagaaa aggggaatcc taaagtaagg tgcaacaatt
                                                                     600
                                                                     660
aaqaqacaac actttggcta acaatcttgg atccacattt cagtcagggc cttccacata
gaggggaaag acttttctct cagaagttag aatctttctt cctcctttct tgttaaactg
                                                                     720
                                                                     780
agagcagtgt tttgtttgct caatattaca tgtacaaaag gagattagaa gaaaatgcat
                                                                     840
cacaaaacca tcttgaacgt tcagctcttc ctgccaatac atcacaactc ttaggtttta
gacggggcct gggaatacgt aagtgttttt tcttttttt ttttttaagt gaaagcaagt
                                                                     900
ttattacgaa agcaaaggga taaaagaatg gctgctccat aggcagagag cagcccagta
                                                                     960
                                                                    1020
atcttaaaat aqqaaaataq acactatggc tacaaaaaat aaaaaataaa tgaggtagat
                                                                    1080
aaaattttca cacccaggac ttgcctgttc caacttcata gtcttcatga aatattcatc
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aagaagacaa aaaaaaaaaa aaaaaacctc gta
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<211> 1555
<212> DNA
<213> Homo sapiens
<220>
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<223> n equals a,t,g, or c
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<221> misc_feature
<222> (1391)..(1391)
<223> n equals a,t,g, or c
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<221> misc_feature
<222> (1393)..(1393)
<223> n equals a,t,g, or c
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<221> misc_feature
<222> (1396)..(1396)
<223> n equals a,t,g, or c
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<221> misc_feature
<222> (1551)..(1551)
<223> n equals a,t,g, or c
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gctcagcctc tggatggagc tctttccagc agaagcccag cggcaaaaat ctcagaaaaa
                                                                   240
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caaaagacag gattactggg agcagctaag atgcctarat gaaaggttta ccatcactgc
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                                                                   360
tggttaggaa atggattatg agaactcgaa cagagggaag gtgaaatgca accggaggaa
                                                                   420
acactetgat atgaggtttg aggeetteaa aattgetttg cageataage cacagtgagt
caggagtacc agggagtgga tagaatgttt atttgtttaa ctgagacttt ttagttcatc
                                                                   480
                                                                   540
aattattttg aagggtagaa cactctgtgg gctctctttc tatttccttc tgggtacaat
cacaaaaaaa aaatctctcc tagctgaaat tacatgcagt actagcaaag ggtctctttg
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ttataaactg ttcattaatt gacgaacatt tgtgtactta actatgtata aggcatctca
                                                                   660
                                                                   720
tcgttcaatt tcaaatacaa attaaaatat tttttcacat ttgttatcct gttatgtttt
                                                                   780
ctcttttaca aattgtctgt tcgtatcttt ttgtctctct ttaggcctta ttcttgtcaa
ttcatatgtg ctctaatgaa ttgaaatatt ttctgtatat taaacattac taacctttcc
tctgtcacac tgattgaaaa atgatctatt tagtttgttg ttttgtcttt aattttgtaa
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gctttaaaaa gttaatattg cccttcagac accatcccaa catcacataa gaattttttc
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atgttataaa ttctttgtgg acatatttga taactgtttt attatgagga ggaccataat 1020
taattcaacc attcccctat tttggtcatt taggtttttg ggtttgggtt ttttgtttgt
                                                                  1080
                                                                  1140
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                                                                  1200
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atccagaaat aagtttgctt acggaggctt ctagttctga agatgcaaag ttagatgcca
                                                                  1320
aagcagtgga aagattgaag tcaaacagtc gggcccatgt gtgtgtctta cttcaacctt
                                                                  1380
                                                                  1440
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<211> 1061
<212> DNA
<213> Homo sapiens
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<222> (138)..(138)
<223> n equals a,t,g, or c
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<222> (460)..(460)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (473)..(473)
<223> n equals a,t,g, or c
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<222> (1048)..(1048)
<223> n equals a,t,g, or c
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                                                                   120
                                                                   180
tggccgtaga ccggaatnga catatcattg tggtcgacaa caagtcttgc tgcgtcttta
                                                                   240
cettecagee caatggeaaa etggttggee gttttggggg eegtggggee aetgaeegee
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gaaacatcat tgtggctgac tggggcaaca gccgcatccn aggtattcga canctctggc
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teetteetgt eetatateaa eacatetgea gaaceaetgt atggteeaca gggeetggea
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cgctacctcc agtagctgta cagaggccct gcctggcttg tggagggaca gacattgggg
                                                                   660
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tgcagagett caccetacce ttettacaca cetececace cetgteagte tgetececat
960
accaccctat acacactgac agagacagca ataccccacc ccccatatta aataaatgtc
                                                                  1020
                                                                  1061
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<211> 1532
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<222> (1433)..(1433)
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<221> misc_feature
<222> (1446)..(1446)
<223> n equals a,t,g, or c
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<220>
<221> misc_feature
<222> (1505)..(1505)
<223> n equals a,t,g, or c
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cagcattgct gctaggctcc tcctgcagat catctgaaat gaacctctct tattgatttt
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cctggttgtt gtcatcataa acatatggac cagtgtgatg gtgaaatgag atgaggctcc
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                                                                 1020
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1440
cccggtaccc aattcgccct atagtgagtc gnattacaat tcactggccg cgntttacaa
cgtcgngact gggaaaaccc tggcgttacc caacttaatc gccttgcagc acatccccct
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<210> 175
<211> 1559
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1445)..(1445)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (1551)..(1551)
<223> n equals a,t,g, or c
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gctgccagca gcagcgtctg caagctggac ggactcatcc accgcttcat cacgctcctt
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qcqqacacca qcqactcccq ggcgttggag aaccgagggg cggatgccag catggcctgc
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cggaagetgg cggtggcgca cccgctgctg ctgctcaggc acctgcccat gatcgcggcg
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caccaggggg cgctgtggga ctgccttctg tccttcatcc gcctgctgct gaattacagg
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1794

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                                                                      180
tggcatcttc ccaaaccagt ttccatttgt tggtaatgca cgacattccc tgacccanaa
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<223> n equals a,t,g, or c
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                                                                      360
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1145
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<223> n equals a,t,g, or c

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cattgtctgg atggaccaca gtttatttct ccattcacct actgaaggac atctcggttg
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tggacctatt atcaactaat tcgggtaaat ctcaaggagt gcaattgctg gatccacagt
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                                                                     420
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gaatgtgage tgttcccaaa acgtatgtcc ttcccccatg cctctaccct gcccttccac
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aaactttctg atcttcagca cacactaccc aaccatcaag gctgagactt cccgtggcca
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gcagtgtctc atgctggctt caagccccac agcactgctt ttttcaactt ctcttgtggt
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cgag
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                                                                      180
                                                                      240
aaggaaccag gctccttaga gaaatggatg attccagggc tgtggcaggg taggtacaag
atgaacctaa agtgtcgttt tataccagaa agtaagaaag tattaaagtg tttaaaaaaag
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                                                                      360
tgatcaccaa agtaagtaca ataataaatt ctaagctatt gaagtaaagg catttattat
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                                                                      540
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aaccatcatg gtaattacca gatcagataa ggatcaacag atgccaaatc tagggcaaat
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<211> 616
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (592)..(592)
<223> n equals a,t,g, or c
<220>
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<222> (611)..(611)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
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<222> (613)..(613)
<223> n equals a,t,g, or c
<400> 512
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catccaagtg agattctgaa gttgggctgg cgagtacacg aatggctttc ttactagaga
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gaagtgggac cctgctaatc tgtagcatgt ggtggcatca tggttactca aatatcactg
                                                                      240
gaacagaagg tgaaagaaga aatctgaaga gaaataaaac aaattttcgg cggttccaag
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                                                                      360
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tgatttctgc atttccaact gagcaaacgg sacaccagaa gattatatcc catgcctggc
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ctgcaaggtg ggcagtawgg ctggsggagg ggcacccacc attgctgagg cttgagtagg
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                                                                      616
gctacctctg nanact
<210> 513
<211> 556
<212> DNA
<213> Homo sapiens
<220>
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<223> n equals a,t,g, or c
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                                                                      300
                                                                      360
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ttgaatatgt ttgcttttgt catattggtt ttcataacat ccatgtgggc ccagaccata
                                                                      420
agettacatg tetecagtag tgaggaagtt teetgttaag aactetacee aaggageeat
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                                                                      540
                                                                      556
ctgggccgtc cgttta
<210> 514
<211> 2027
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
<220>
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<222> (1976)..(1976)
<223> n equals a,t,g, or c
<220>
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<222> (1981)..(1981)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (1985)..(1985)
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<220>
<221> misc_feature
<222> (2021)..(2021)
<223> n equals a,t,g, or c
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                                                                   1860
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1980
                                                                   2027
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<222> (715) ... (715)
<223> n equals a,t,g, or c
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180
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acacttggct gctttcaact cttccaccca tctgcctctt ggtctcatct ttaccttctg
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ctaaaggtcc tgaccccac ccccgccacg ccatggggca ccccatggtg gtgcgtcctt
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totgottaco coacaoggtg ototgotgac coaggtottg otgtotocca ayagcoccac
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gaggettyce gtegeteetg gacaetrmag getgageeeg etgeeeegee geeteeatga
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ggaaggettt teetetgnga geeccaggee accettteee teetttaagt aattaettaa
                                                                     660
                                                                     720
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<211> 1396
<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> (1325)..(1325)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (1327)..(1327)
<223> n equals a,t,g, or c
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qctqqaqagc caqaaagagc cctgcagcct gggcctcatc atcacacctc gccctcaagg
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<210> 517
<211> 1654
<212> DNA
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<213> Homo sapiens
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<222> (872)..(872)
<223> n equals a,t,g, or c
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<222> (1564)..(1564)
<223> n equals a,t,g, or c
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                                                                     360
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<210> 518
<211> 447
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<222> (18)..(18)
<223> n equals a,t,g, or c
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<221> misc_feature
<222> (435)..(435)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (445)..(445)
<223> n equals a,t,g, or c
<400> 518
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gaccaccact agcaaatgtc atcagagtac aaaaaatgga aacagaggct atcattaata
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atacattact tcactattga cgggatgacc gtgggttttg aagcttatga gttcaaaagt
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cctctttaaa gtattttca attctgctcc cgaagtgggt gaagtgtgtg gtggtggcca
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<211> 641
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<223> n equals a,t,g, or c
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<222> (11)..(11)
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ccggaccatg tcggagttgg ggggccccgt ggaggatctg atcgccagan gccccatttc
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                                                                    360
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caqcctactg tagtagatac gcaacagata wtgtgggaaa aaaagagata agaggaggaa
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gaatgtcccc ctcaaaaaaa gctaatggaa tatttggcat aaagggcatt tggtggtttt
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ataaaacttt aaatgtataa aactttatca aataaagttt tattttcccc tttaaaatgt
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gttcacagtt gtattccagt attcaagata gattcctgat ttttcaatta ggaaaagtaa
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                                                               2160
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                                                               2220
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                                                               2340
2361
aaaaaaaaa aagaangaga a
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cccgatgggg actatgagga gaacgatgac cccgagaagt gccagctgct cttcagggtg
                                                                300
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accetgeggg aggagtteac egtgetggge caceaggtgg aaggatgetg ggegegtget
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                                                                660
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                                                                900
960
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gcacagttta tgtggtgcgg aattaaactt ccccatcctg cagattatgt ggaaataccc
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<222> (498)..(498)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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gatgttatat caaaatatgt tgttatactt taggataatc ggtgtgttag ccctgaattt
                                                                      180
                                                                      240
cagcataagt cccatttttt tccatgggag tctaggaaag ctatatgttt attcagcagc
                                                                      300
aaaatacagt ttggaactta aataaactat tgatcaattc tggtcttatg ctagaaggaa
taaagcatca agaaaaagaa aagattgctg tcaagaccag gaaaattgac aatagagtat
                                                                      360
tagaatgcag aaatgagggg aagtggaaar gccascaagt aggagagaaa aagtgcaggg
                                                                      420
acagtagaaa gtgaatgtag gagcttctga cccagcactc angaacgcaa ttcatcccta
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aaaagctgtt gcgtctangt tgccagtaac caattaaaan ccgtttgaag tagagtga
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<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> (5)..(5)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (17)..(17)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (21)..(21)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (36)..(36)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (107)..(107)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (150)..(150)
<223> n equals a,t,g, or c
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<222> (323)..(323)
<223> n equals a,t,g, or c
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<222> (1307)..(1307)
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<223> n equals a,t,g, or c

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<222> (1337)..(1337)
<223> n equals a,t,g, or c
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<222> (1341)..(1341)
<223> n equals a,t,g, or c
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<221> misc_feature
<222> (1343)..(1343)
<223> n equals a,t,g, or c
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ccatgtgcct ggaccttctc cagaccatgn aggcccaggc gagtgactca ctgccattca
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aggaataagt attgaagact taagaaatgc attttgcagc aggtcctcgc tgtactgggg
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cagcggtcca ttcatagagc ccngctagaa tagaggtcac aagctcagaa gcttctctaa
                                                                      360
ggcaggcagg aaatttaagt cgatactatg atctgcattg tgggctggaa tgaacggaag
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gtgcctagtc taaacagctg cttgttgctc agctgttgtt gccgtattgg gaattcaagc
                                                                      480
ctaatgatgt ttggtattcc cattttcaaa agaagtcagg aaatgcagat ttctatgtaa
atttttaaaa cttctgaact gtgtatgagc catacaaaat acatttgcag gccagtcgac
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atcctctgat ccagaatatc aatttgtgag acaagttgtt ggtgaggcag cattmcatag
                                                                      660
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                                                                     780
cactmcctty catttcactt ctctttgctt cactttcctc atcagtaaaa taaaaataat
atcagtacct acctcatagg gtttcatgag cattaaataa attaaaaccc ataaagtact
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                                                                    1260
                                                                    1320
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<223> n equals a,t,g, or c
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<223> n equals a,t,q, or c
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<221> misc_feature
<222> (158)..(158)
<223> n equals a,t,g, or c
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<222> (592)..(592)
<223> n equals a,t,g, or c
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aattgctgga gagtagtcct tgttctttgc tgacaganca ggagcagagt gtggaatgaa
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aggggacct gctccccca tttccattta ctctcctttc caccaaccta gggtgacatt
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tgcactattg gtagcaggtg ctgcctgggg tagctcttat ggtctgtgct tgaagtgtgc
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gatcaaatga ctcttatgat gacagctgtc tcactrtact ttcaaactgg ttttaatttg
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                                                                     840
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                                                                      420
ccagaaagat tccagaactg caaagacctg tttgatctga tcctcacttg cgaagagaga
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<222> (14)..(14)
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<222> (33)..(33)
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gcagagtcag caggcttctt ctcagagatg acagaagacg agttggtggt gctgcagcag
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agtgaccgtg tgctggaggg cttcatcaag ggcagataat cgcggccacc acctgtagga
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1140
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                                                                    300
                                                                    360
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<213> Homo sapiens
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<211> 284
<212> DNA
<213> Homo sapiens
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atgtgctggt gtggaaacgg ggcccagcca gcacgcctca aggtagatgg aatccccact
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<211> 1494
<212> DNA
<213> Homo sapiens
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<222> (52)..(52)
<223> n equals a,t,g, or c
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<222> (453)..(453)
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<221> misc_feature
<222> (12)..(12)
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<222> (124)..(124)
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1260

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gccagtggtc atggaatggg ctggggtcaa agactgggtg cctgggagct gaggcagcca
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<211> 1598
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                                                                    3360
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ggaaccaggt ctgaaaaagt agagagaagt gaaagtagag tctgggaagt agctgcctat
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aactgagact agacggaaaa ggaatactcg tgtattttaa gatatgaatg tgactcaaga
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                                                                    3900
tacagacttg tactaacaca ccgtaatttg gcatttgttt aacctcattt ataaaagctt
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                                                                    4020
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gcgaatggca aattgtaagc gttaatattt tgttaaaatt cgcgttaaat ttttgttaaa
                                                                    4260
                                                                    4320
tcagctcatt ttttaaccaa taggccgaaa tcggcaaaat cccttataaa tcaaaagaat
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ttatcg
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<210> 626 <211> 207

<212> PRT

<213> Homo sapiens

<400> 626

Met Ile Lys His Val Ala Trp Leu Ile Phe Thr Asn Cys Ile Phe Phe 1 5 10 15

Cys Pro Val Ala Phe Phe Ser Phe Ala Pro Leu Ile Thr Ala Ile Ser 20 25 30

Ile Ser Pro Glu Ile Met Lys Ser Val Thr Leu Ile Phe Pro Leu 35 40 45

Pro Ala Cys Leu Asn Pro Val Leu Tyr Val Phe Phe Asn Pro Lys Phe 50 55 60

Lys Glu Asp Trp Lys Leu Leu Lys Arg Arg Val Thr Lys Lys Ser Gly 65 70 75 80

Ser Val Ser Val Ser Ile Ser Ser Gln Gly Gly Cys Leu Glu Gln Asp 85 90 95

Phe Tyr Tyr Asp Cys Gly Met Tyr Ser His Leu Gln Gly Asn Leu Thr 100 105 110

Val Cys Asp Cys Cys Glu Ser Phe Leu Leu Thr Lys Pro Val Ser Cys 115 120 125

Lys His Leu Ile Lys Ser His Ser Cys Pro Ala Leu Ala Val Ala Ser

130 135 140

Cys Gln Arg Pro Glu Gly Tyr Trp Ser Asp Cys Gly Thr Gln Ser Ala 145 150 155 160

His Ser Asp Tyr Ala Asp Glu Glu Asp Ser Phe Val Ser Asp Ser Ser 165 170 175

Asp Gln Val Gln Ala Cys Gly Arg Ala Cys Phe Tyr Gln Ser Arg Gly 180 185 190

Phe Pro Leu Val Arg Tyr Ala Tyr Asn Leu Pro Arg Val Lys Asp 195 200 205

<210> 627

<211> 72

<212> PRT

<213> Homo sapiens

<400> 627

Met Pro Ser Ile Arg Leu Gly Leu Ser His Leu Phe Leu Thr Ala Gly
1 5 10 15

Ile Tyr Cys Leu Leu Cys Ala Arg Cys Cys Ala Leu Gly Arg Gly 20 25 30

Thr Ala Trp Ala Ala Cys Pro Gly Gly Ala Cys Gly Leu Met Gly Glu
35 40 45

Ala Asp Pro Ser Pro Pro His Cys Gln Gln Gly Gln Gly Lys Ser Thr 50 55

His Arg Gly Leu Ile Pro Tyr Val 65 70

<210> 628

<211> 100

<212> PRT

<213> Homo sapiens

<400> 628

Met Thr Lys Ala Arg Leu Phe Arg Leu Trp Leu Val Leu Gly Ser Val 1 5 10

Phe Met Ile Leu Leu Ile Ile Val Tyr Trp Asp Ser Ala Gly Ala Ala 20 25 30

His Phe Tyr Leu His Thr Ser Phe Ser Arg Pro His Thr Gly Pro Pro

Leu Pro Thr Pro Gly Pro Asp Arg Asp Arg Glu Leu Thr Ala Asp Ser 50 60

Asp Val Asp Glu Phe Leu Asp Lys Phe Leu Ser Ala Gly Val Lys Gln 65 70 75 80

Ser Asp Leu Pro Arg Lys Glu Thr Glu Gln Pro Pro Ala Pro Gly Ser

· •

85 90 95

Met Glu Glu Thr 100

<210> 629

<211> 114

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any amino acid

<400> 629

Met Ala Gly Pro Arg Ala Ser Thr Gly Pro Arg Pro Xaa Cys Leu Val 1 5 10 15

Leu Phe Leu Phe Asn Phe Ile Phe Cys Phe Met Ser Val Cys Pro Pro 20 25 30

Thr Pro Thr Pro Phe Ser Val Lys Trp Gly Ala Leu Gly Glu Ser Leu 35 40 45

Leu Pro Pro Ser Leu Ser Gln Asp Leu Pro Pro Arg His Gln Pro Ser 50 60

Leu Trp Thr Arg Gln Arg Ala Asp Arg Val Gly Arg Gly Leu Arg Val 65 70 75 80

Ala Arg Ala Ser Pro Pro Ala Asn Gly Pro Leu Leu Arg Pro Pro Val 85 90 95

Ser Pro Cys Pro Phe Leu Lys Gln Asn Ala Leu Val Cys Lys Pro Leu 100 105 110

Asp Ala

<210> 630

<211> 131

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (43)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (44)

<223> Xaa equals any amino acid

<220>

<221> SITE

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<222> (49)
<223> Xaa equals any amino acid
<220>
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<222> (66)
<223> Xaa equals any amino acid
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<222> (94)
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<222> (102)
<223> Xaa equals any amino acid
<400> 630
Met Trp Ser Val Ile Arg Ser Leu Cys Pro Ser Arg Leu Gln Ser Leu
His Val Cys Phe Cys Pro Arg Leu Cys Leu Ala Wal Pro Cys Val Phe
                                 25
His Leu Ser Ser Pro Trp Phe His Val Arg Xaa Xaa Phe Phe Ser Gly
Xaa Pro Gly Cys Ile Trp Gly Ile Cys Phe Val Gly Leu Leu Leu Gly
Ala Xaa Arg Pro Arg Ser Gly Cys Leu Cys Ser Pro Ser Xaa Cys Leu
Trp Ser Leu Val Val Cys Glu Ser Ile Cys Leu Pro Arg Xaa Gly Pro
                                      90
Asn Gln Ala Pro Pro Xaa Pro Leu Phe Leu Ser Leu Asn Leu Pro Phe
                                105
Leu Phe Gln Pro Leu Gln Met Arg Trp Leu Ser Ala Val Gly Trp Arg
                            120
Glu Ala Met
    130
<210> 631
<211> 182
<212> PRT
<213> Homo sapiens
<400> 631
Met Lys Gly Trp Gly Trp Leu Ala Leu Leu Gly Ala Leu Leu Gly
```

5

Thr Ala Trp Ala Arg Arg Ser Gln Asp Leu His Cys Gly Ala Cys Arg
20 25 30

Ala Leu Val Asp Glu Leu Glu Trp Glu Ile Ala Gln Val Asp Pro Lys 35 40 45

Lys Thr Ile Gln Met Gly Ser Phe Arg Ile Asn Pro Asp Gly Ser Gln 50 55 60

Ser Val Val Glu Val Pro Tyr Ala Arg Ser Glu Ala His Leu Thr Glu 65 70 75 80

Leu Leu Glu Glu Ile Cys Asp Arg Met Lys Glu Tyr Gly Glu Gln Ile 85 90 95

Asp Pro Ser Thr His Arg Lys Asn Tyr Val Arg Val Val Gly Arg Asn 100 105 110

Gly Glu Ser Ser Glu Leu Asp Leu Gln Gly Ile Arg Ile Asp Ser Asp 115 120 125

Ile Ser Gly Thr Leu Lys Phe Ala Cys Glu Ser Ile Val Glu Glu Tyr 130 135 140

Glu Asp Glu Leu Ile Glu Phe Phe Ser Arg Glu Ala Asp Asn Val Lys 145 150 155 160

Asp Lys Leu Cys Ser Lys Arg Thr Asp Leu Cys Asp His Ala Leu His 165 170 175

Ile Ser His Asp Glu Leu 180

<210> 632

<211> 49

<212> PRT

<213> Homo sapiens

<400> 632

Met Arg Leu Cys Ser Phe Thr Lys Val Pro Met Asn Leu Phe Leu Asn 1 5 10 15

Val Ile Leu Lys Phe Tyr Asn Phe Leu Phe Ser Leu Ile Leu Gly 20 25 30

Lys Ser Cys Leu Ala Ser Leu Gly Leu Cys Lys Asn Asn Lys Cys Leu 35 40 45

Ser

<210> 633

<211> 218

<212> PRT

<213> Homo sapiens

<400> 633

Met Gly Ser Ala Ala Leu Glu Ile Leu Gly Leu Val Leu Cys Leu Val 1 5 10 15

Gly Trp Gly Gly Leu Ile Leu Ala Cys Gly Leu Pro Met Trp Gln Val  $20 \\ 25 \\ 30$ 

Thr Ala Phe Leu Asp His Asn Ile Val Thr Ala Gln Thr Trp Lys
35 40 45

Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr Gly His Met Gln Cys 50 55 60

Lys Val Tyr Asp Ser Val Leu Ala Leu Ser Thr Glu Val Gln Ala Ala 65 70 75 80

Arg Ala Leu Thr Val Ser Ala Val Leu Leu Ala Phe Val Ala Leu Phe
85 90 95

Val Thr Leu Ala Gly Ala Gln Cys Thr Thr Cys Val Ala Pro Gly Pro 100 105 110

Ala Lys Ala Arg Val Ala Leu Thr Gly Gly Val Leu Tyr Leu Phe Cys 115 120 125

Gly Leu Leu Ala Leu Val Pro Leu Cys Trp Phe Ala Asn Ile Val Val 130 135 140

Arg Glu Phe Tyr Asp Pro Ser Val Pro Val Ser Gln Lys Tyr Glu Leu 145 150 155 160

Gly Ala Ala Leu Tyr Ile Gly Trp Ala Ala Thr Ala Leu Leu Met Val 165 170 175

Gly Gly Cys Leu Leu Cys Cys Gly Ala Trp Val Cys Thr Gly Arg Pro 180 185 190

Asp Leu Ser Phe Pro Val Lys Tyr Ser Ala Pro Arg Arg Pro Thr Ala 195 200 205

Thr Gly Asp Tyr Asp Lys Lys Asn Tyr Val 210 215

<210> 634

<211> 30

<212> PRT

<213> Homo sapiens

<400> 634

Met Ala Leu Ser Val Leu Val Leu Leu Leu Leu Ala Val Leu Tyr Glu
1 5 10 15

Gly Ile Lys Val Gly Lys Ala Ser Cys Ser Thr Arg Tyr Trp 20 25 30

<210> 635

<211> 62

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<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (16)
<223> Xaa equals any amino acid
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<221> SITE
<222> (54)
<223> Xaa equals any amino acid
<400> 635
Met Val Thr Gly Phe Phe Phe Ile Leu Met Thr Val Leu Trp Phe Xaa
                            10
Arg Glu Pro Gly Phe Val Pro Gly Trp Asp Ser Phe Phe Glu Lys Lys
                                 25
Gly Tyr Arg Thr Asp Ala Thr Val Ser Val Phe Leu Gly Phe Leu Leu
                             40
Phe Leu Ile Pro Ala Xaa Glu Ala Leu Leu Trp Glu Lys Glu
                         55
<210> 636
<211> 93
<212> PRT
<213> Homo sapiens
<400> 636
Met Pro Arg Ala Thr Leu Trp Gly His Leu Ser Pro Ala Trp Val Leu
Val Pro Trp Thr Pro Arg Ala Cys Gly Gln Ala Ala Pro Gly Arg Gly
His Val Ala Ser Asp His Lys Ser Gly Leu Pro Trp Pro Lys His Cys
Ser Cys Leu His Pro Arg Ala Ser Gln Pro Cys Leu Phe Ser Leu Asn
Ser Asn Arg Thr Val Phe Thr Ala Ile Gln Arg Val Ala Leu Gly Trp
Thr Phe Trp Val Gln Ala Asn Leu Val Pro Arg Cys Thr
                 85
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<210> 637 <211> 122 <212> PRT <213> Homo sapiens

<400> 637

Met Cys Tyr Leu Leu Leu Leu Ile Gln Thr Ala Glu Leu Leu Ile

5 10 His Pro Gln Gly Leu Gln Ala Val Ser Asn Gly Glu Ser Ala Leu Lys Gly Thr Arg Pro Thr Phe Ser Ser Pro Phe Ile Leu Val Thr Glu Gly 40 Arg Lys Glu Trp Glu Gly Val Phe Leu Ser Ser Gly Trp Lys Gly Asn 55 Thr Leu Ser Asn Tyr Tyr Ile Ser Leu Val Phe Tyr Tyr Ser Arg Ile Leu Gln Pro Tyr Phe Tyr Cys Leu Trp Gly Lys Leu Glu Met Val Thr 90 Leu Ile Arg Ser Val Trp Arg Gly Ile Asn Gly Gly Asp Lys Ile Gln 105 Leu Val Leu Glu Asn Val Lys Val Leu Lys 120 <210> 638 <211> 198 <212> PRT <213> Homo sapiens <220> <221> SITE . <222> (29) <223> Xaa equals any amino acid <400> 638 Met Lys Lys Ser Leu Glu Asn Leu Asn Arg Leu Gln Val Met Leu Leu His Leu Thr Ala Ala Phe Leu Gln Arg Ala Gln His Xaa Phe Asp Tyr Lys Asp Glu Ser Gly Phe Pro Lys Pro Pro Ser Tyr Asn Val Ala Thr Thr Leu Pro Ser Tyr Asp Glu Ala Glu Arg Thr Lys Ala Glu Ala Thr Ile Pro Leu Val Pro Gly Arg Asp Glu Asp Phe Val Gly Arg Asp Asp Phe Asp Asp Ala Asp Gln Leu Arg Ile Gly Asn Asp Gly Ile Phe Met Leu Thr Phe Phe Met Ala Phe Leu Phe Asn Trp Ile Gly Phe Phe Leu 105

Ser Phe Cys Leu Thr Thr Ser Ala Ala Gly Arg Tyr Gly Ala Ile Ser

115

PCT/US02/08277

WO 03/038063 140 130 135 Thr Tyr Phe Pro Gly Tyr Phe Asp Gly Gln Tyr Trp Leu Trp Trp Val 150 Phe Leu Val Leu Gly Phe Leu Leu Phe Leu Arg Gly Phe Ile Asn Tyr 165 170 Ala Lys Val Arg Lys Met Pro Glu Thr Phe Ser Asn Leu Pro Arg Thr 185 Arg Val Leu Phe Ile Tyr 195 <210> 639 <211> 66 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (12) <223> Xaa equals any amino acid Met Asn Leu Ser Ile Ile Leu Pro Asn Ser Phe Xaa His Leu Cys Asn Phe Ser Leu Phe Leu Leu Pro Leu Pro Val Pro Ser Gln Pro Leu Ile Cys Ser Gly Asn Tyr Gln Ser Ser Phe Cys His Tyr Arg Leu Ile Cys Ile Phe Lys Glu Ile Tyr Ile His Gly Thr Ile His His Leu Cys Phe Val Val 65 <210> 640 <211> 317 <212> PRT <213> Homo sapiens <220>

<221> SITE <222> (207) <223> Xaa equals any amino acid <400> 640 Met Pro Gly Leu Gly Arg Pro Arg Gln Ala Arg Trp Thr Leu Met Leu

Leu Leu Ser Thr Ala Met Tyr Gly Ala His Ala Pro Leu Leu Ala Leu 25

Cys His Val Asp Gly Arg Val Pro Phe Arg Pro Ser Ser Ala Val Leu  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Leu Thr Glu Leu Thr Lys Leu Leu Cys Ala Phe Ser Leu Leu Val 50 60

Gly Trp Gln Ala Trp Pro Gln Gly Pro Pro Pro Trp Arg Gln Ala Ala 65 70 75 80

Pro Phe Ala Leu Ser Ala Leu Leu Tyr Gly Ala Asn Asn Leu Val 85 90 95

Ile Tyr Leu Gln Arg Tyr Met Asp Pro Ser Thr Tyr Gln Val Leu Ser 100 105 110

Asn Leu Lys Ile Gly Ser Thr Ala Val Leu Tyr Cys Leu Cys Leu Arg 115 120 125

His Arg Leu Ser Val Arg Gln Gly Leu Ala Leu Leu Leu Met Ala 130 135 140

Ala Gly Ala Cys Tyr Ala Ala Gly Gly Leu Gln Val Pro Gly Asn Thr 145 150 155 160

Leu Pro Ser Pro Pro Pro Ala Ala Ala Ser Pro Met Pro Leu His
165 170 175

Ile Thr Pro Leu Gly Leu Leu Leu Leu Ile Leu Tyr Cys Leu Ile Ser 180 185 190

Gly Leu Ser Ser Val Tyr Thr Glu Leu Leu Met Lys Arg Gln Xaa Leu 195 200 205

Pro Leu Ala Leu Gln Asn Leu Phe Leu Tyr Thr Phe Gly Val Leu Leu 210 215 220

Asn Leu Gly Leu His Ala Gly Gly Gly Ser Gly Pro Gly Leu Leu Glu 225 230 235 240

Gly Phe Ser Gly Trp Ala Ala Leu Val Val Leu Ser Gln Ala Leu Asn 245 250 255

Gly Leu Leu Met Ser Ala Val Met Lys His Gly Ser Ser Ile Thr Arg 260 265 270

Leu Phe Val Val Ser Cys Ser Leu Val Val Asn Ala Val Leu Ser Ala 275 280 285

Val Leu Leu Arg Leu Gln Leu Thr Ala Ala Phe Phe Leu Ala Thr Leu 290 295 300

Leu Ile Gly Leu Ala Met Arg Leu Tyr Tyr Gly Ser Arg 305 310 315

<210> 641

<211> 446

<212> PRT

<213> Homo sapiens

<400> 641 Met Leu Leu Gly Leu Leu Met Ala Ala Cys Phe Thr Phe Cys Leu Ser His Gln Asn Leu Lys Glu Phe Ala Leu Thr Asn Pro Glu Lys Ser Ser 25 Thr Lys Glu Thr Glu Arg Lys Glu Thr Lys Ala Glu Glu Glu Leu Asp 40 Ala Glu Val Leu Glu Val Phe His Pro Thr His Glu Trp Gln Ala Leu 55 Gln Pro Gly Gln Ala Val Pro Ala Gly Ser His Val Arg Leu Asn Leu Gln Thr Gly Glu Arg Glu Ala Lys Leu Gln Tyr Glu Asp Lys Phe Arg Asn Asn Leu Lys Gly Lys Arg Leu Asp Ile Asn Thr Asn Thr Tyr Thr Ser Gln Asp Leu Lys Ser Ala Leu Ala Lys Phe Lys Glu Gly Ala Glu 120 Met Glu Ser Ser Lys Glu Asp Lys Ala Arg Gln Ala Glu Val Lys Arg 135 130 Leu Phe Arg Pro Ile Glu Glu Leu Lys Lys Asp Phe Asp Glu Leu Asn 150 155 Val Val Ile Glu Thr Asp Met Gln Ile Met Val Arg Leu Ile Asn Lys 165 Phe Asn Ser Ser Ser Ser Leu Glu Glu Lys Ile Ala Ala Leu Phe 185 Asp Leu Glu Tyr Tyr Val His Gln Met Asp Asn Ala Gln Asp Leu Leu 200 Ser Phe Gly Gly Leu Gln Val Val Ile Asn Gly Leu Asn Ser Thr Glu 215 Pro Leu Val Lys Glu Tyr Ala Ala Phe Val Leu Gly Ala Ala Phe Ser 225 230 Ser Asn Pro Lys Val Gln Val Glu Ala Ile Glu Gly Gly Ala Leu Gln 250 Lys Leu Leu Val Ile Leu Ala Thr Glu Gln Pro Leu Thr Ala Lys Lys Lys Val Leu Phe Ala Leu Cys Ser Leu Leu Arg His Phe Pro Tyr Ala 280

315

Gln Arg Gln Phe Leu Lys Leu Gly Gly Leu Gln Val Leu Arg Thr Leu

Val Gln Glu Lys Gly Thr Glu Val Leu Ala Val Arg Val Val Thr Leu

310

305

Leu Tyr Asp Leu Val Thr Glu Lys Met Phe Ala Glu Glu Glu Ala Glu 325 330 335

Leu Thr Gln Glu Met Ser Pro Glu Lys Leu Gln Gln Tyr Arg Gln Val

His Leu Leu Pro Gly Leu Trp Glu Gln Gly Trp Cys Glu Ile Thr Ala 355 360 365

His Leu Leu Ala Leu Pro Glu His Asp Ala Arg Glu Lys Val Leu Gln 370 375 380

Thr Leu Gly Val Leu Leu Thr Thr Cys Arg Asp Arg Tyr Arg Gln Asp 385 390 395 400

Pro Gln Leu Gly Arg Thr Leu Ala Ser Leu Gln Ala Glu Tyr Gln Val 405 410 415

Leu Ala Ser Leu Glu Leu Gln Asp Gly Glu Asp Glu Gly Tyr Phe Gln
420 425 430

Glu Leu Leu Gly Ser Val Asn Ser Leu Leu Lys Glu Leu Arg 435 440 445

<210> 642

<211> 563

<212> PRT

<213> Homo sapiens

<400> 642

Met Trp Ala Val Leu Arg Leu Ala Leu Arg Pro Cys Ala Arg Ala Ser

Pro Ala Gly Pro Arg Ala Tyr His Gly Asp Ser Val Ala Ser Leu Gly 20 25 30

Thr Gln Pro Asp Leu Gly Ser Ala Leu Tyr Gln Glu Asn Tyr Lys Gln 35 40 45

Met Lys Ala Leu Val Asn Gln Leu His Glu Arg Val Glu His Ile Lys 50 55 60

Leu Gly Gly Glu Lys Ala Arg Ala Leu His Ile Ser Arg Gly Lys 65 70 75 80

Leu Leu Pro Arg Glu Arg Ile Asp Asn Leu Ile Asp Pro Gly Ser Pro 85 90 95

Phe Leu Glu Leu Ser Gln Phe Ala Gly Tyr Gln Leu Tyr Asp Asn Glu 100 105 110

Glu Val Pro Gly Gly Gly Ile Ile Thr Gly Ile Gly Arg Val Ser Gly
115 120 125

Val Glu Cys Met Ile Ile Ala Asn Asp Ala Thr Val Lys Gly Gly Ala 130 135 140

Tyr Tyr Pro Val Thr Val Lys Lys Gln Leu Arg Ala Gln Glu Ile Ala 145 150 155 160

Met	Gln	Asn	Arg	Leu 165	Pro	Cys	Ile	Tyr	Leu 170	Val	Asp	Ser	Gly	Gly 175	Ala
Tyr	Leu	Pro	Arg 180	Gln	Ala	Asp	Val	Phe 185	Pro	Asp	Arg	Asp	His 190	Phe	Gly
Arg	Thr	Phe 195	Tyr	Asn	Gln	Ala	Ile 200	Met	Ser	Ser	Lys	Asn 205	Ile	Ala	Gln
Ile	Ala 210	Val	Val	Met	Gly	Ser 215	Cys	Thr	Ala	Gly	Gly 220	Ala	Tyr	Val	Pro
Ala 225	Met	Ala	Asp	Glu	Asn 230	Ile	Ile	Val	Arg	Lys 235	Gln	Gly	Thr	Ile	Phe 240
Leu	Ala	Gly	Pro	Pro 245	Leu	Val	Lys	Ala	Ala 250	Thr	Gly	Glu	Glu	Val 255	Ser
Ala	Glu	Asp	Leu 260	Gly	Gly	Ala	Asp	Leu 265	His	Cys	Arg	Lys	Ser 270	Gly	Val
Ser	Asp	His 275	Trp	Ala	Leu	Asp	Asp 280	His	His	Ala	Leu	His 285	Leu	Thr	Arg
	290					295					300		Val		
305					310					315			Tyr		320
Val	Gly	Ala	Asn	Leu 325	Lys	Arg	Ser	Phe	Asp 330	Val	Arg	Glu	Val	Ile 335	Ala
Arg	Ile	Val	Asp 340	Gly	Ser	Arg	Phe	Thr 345	Glu	Phe	Lys	Ala	Phe 350	Tyr	Gly
_		355					360					365	Pro		
Ile	Val 370	Gly	Asn	Asn	Gly	Val 375	Leu	Phe	Ser	Glu	Ser 380	Ala	Lys	Lys	Gly
385					390					395			Leu		400
Leu	Gln	Asn	Ile	Thr 405	Gly	Phe	Met	Val	Gly 410	Arg	Glu	Tyr	Glu	Ala 415	Glu
Gly	Ile	Ala	Lys 420	Asp	Gly	Ala	Lys	Met 425	Val	Ala	Ala	Val	Ala 430	Cys	Ala
Gln	Val	Pro 435	Lys	Ile	Thr	Leu	Ile 440	Ile	Gly	Gly	Ser	Tyr 445	Gly	Ala	Gly
Asn	Tyr 450	Gly	Met	Суѕ	Gly	Arg 455	Ala	Tyr	Ser	Pro	Arg 460	Phe	Leu	Tyr	Ile
Trp 465	Pro	Asn	Ala	Arg	Ile 470	Ser	Val	Met	Gly	Gly 475	Glu	Gln	Ala	Ala	Asn 480

Val Leu Ala Thr Ile Thr Lys Asp Gln Arg Ala Arg Glu Gly Lys Gln 485

Phe Ser Ser Ala Asp Glu Ala Ala Leu Lys Glu Pro Ile Ile Lys Lys 500

Phe Glu Glu Gly Asn Pro Tyr Tyr Ser Ser Ala Arg Val Trp Asp 515 520 525

Asp Gly Ile Ile Asp Pro Ala Asp Thr Arg Leu Val Leu Gly Leu Ser 530 540

Phe Ser Ala Ala Leu Asn Ala Pro Ile Glu Lys Thr Asp Phe Gly Ile 545 550 555 560

Phe Arg Met

<210> 643

<211> 53

<212> PRT

<213> Homo sapiens

<400> 643

Met Val Gln Phe Glu Val Ile Phe Leu Leu Phe Gly Leu Cys Phe Ser 1 5 10 15

Ser Ser Ser Ser Arg Leu Val Gly Ser Gln Val Glu Asn Phe Ser Pro 20 25 30

Thr Pro Cys Ile Phe Gln Ala Phe Arg Cys Ser Ser Leu Ala Ile Ile 35 40 45

Ser Met Ser Leu Ser 50

<210> 644

<211> 607

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (242)

<223> Xaa equals any amino acid

<400> 644

Met Arg Thr Pro Gln Leu Ala Leu Leu Gln Val Phe Phe Leu Val Phe
1 5 10 15

Pro Asp Gly Val Arg Pro Gln Pro Ser Ser Ser Pro Ser Gly Ala Val 20 25 30

Pro Thr Ser Leu Glu Leu Gln Arg Gly Thr Asp Gly Gly Thr Leu Gln 35 40 45

Ser Pro Ser Glu Ala Thr Ala Thr Arg Pro Ala Val Pro Gly Leu Pro

50 55 60

Thr Val Val Pro Thr Leu Val Thr Pro Ser Ala Pro Gly Asn Arg Thr 65 70 75 80

Val Asp Leu Phe Pro Val Leu Pro Ile Cys Val Cys Asp Leu Thr Pro 85 90 95

Gly Ala Cys Asp Ile Asn Cys Cys Cys Asp Arg Asp Cys Tyr Leu Leu 100 105 110

His Pro Arg Thr Val Phe Ser Phe Cys Leu Pro Gly Ser Val Arg Ser 115 120 125

Ser Ser Trp Val Cys Val Asp Asn Ser Val Ile Phe Arg Ser Asn Ser 130 135 140

Pro Phe Pro Ser Arg Val Phe Met Asp Ser Asn Gly Ile Arg Gln Phe 145 150 155 160

Cys Val His Val Asn Asn Ser Asn Leu Asn Tyr Phe Gln Lys Leu Gln 165 170 175

Lys Val Asn Ala Thr Asn Phe Gln Ala Leu Ala Ala Glu Phe Gly Gly
180 185 190

Glu Ser Phe Thr Ser Thr Phe Gln Thr Gln Ser Pro Pro Ser Phe Tyr 195 200 205

Arg Ala Gly Asp Pro Ile Leu Thr Tyr Phe Pro Lys Trp Ser Val Ile 210 215 220

Ser Leu Leu Arg Gln Pro Ala Gly Val Gly Ala Gly Gly Leu Cys Ala 225 230 235 240

Glu Xaa Asn Pro Ala Gly Phe Leu Glu Ser Lys Ser Thr Thr Cys Thr 245 250 255

Arg Phe Phe Lys Asn Leu Ala Ser Ser Cys Thr Leu Asp Ser Ala Leu 260 265 270

Asn Ala Ala Ser Tyr Tyr Asn Phe Thr Val Leu Lys Val Pro Arg Ser 275 280 285

Met Thr Asp Pro Gln Asn Met Glu Phe Gln Val Pro Val Ile Leu Thr 290 295 300

Ser Gln Ala Asn Ala Pro Leu Leu Ala Gly Asn Thr Cys Gln Asn Val 305 310 315 320

Val Ser Gln Val Thr Tyr Glu Ile Glu Thr Asn Gly Thr Phe Gly Ile 325 330 335

Gln Lys Val Ser Val Ser Leu Gly Gln Thr Asn Leu Thr Val Glu Pro 340 345 350

Gly Ala Ser Leu Gln Gln His Phe Ile Leu Arg Phe Arg Ala Phe Gln 355 360 365

Gln Ser Thr Ala Ala Ser Leu Thr Ser Pro Arg Ser Gly Asn Pro Gly 370 375 380

Tyr Ile Val Gly Lys Pro Leu Leu Ala Leu Thr Asp Asp Ile Ser Tyr Ser Met Thr Leu Leu Gln Ser Gln Gly Asn Gly Ser Cys Ser Val Lys Arg His Glu Val Gln Phe Gly Val Asn Ala Ile Ser Gly Cys Lys Leu 425 Arg Leu Lys Lys Ala Asp Cys Ser His Leu Gln Glu Ile Tyr Gln Thr Leu His Gly Arg Pro Arg Pro Glu Tyr Val Ala Ile Phe Gly Asn 455 Ala Asp Pro Ala Gln Lys Gly Gly Trp Thr Arg Ile Leu Asn Arg His 470 Cys Ser Ile Ser Ala Ile Asn Cys Thr Ser Cys Cys Leu Ile Pro Val 485 Ser Leu Glu Ile Gln Val Leu Trp Ala Tyr Val Gly Leu Leu Ser Asn 505 Pro Gln Ala His Val Ser Gly Val Arg Phe Leu Tyr Gln Cys Gln Ser 520 Ile Gln Asp Ser Gln Gln Val Thr Glu Val Ser Leu Thr Thr Leu Val 535 Asn Phe Val Asp Ile Thr Gln Lys Pro Gln Pro Pro Arg Gly Gln Pro 550 555 Lys Met Asp Trp Lys Trp Pro Phe Asp Phe Pro Phe Lys Val Ala 570 565 Phe Ser Arg Gly Val Phe Ser Gln Lys Cys Ser Val Ser Pro Ile Leu 585 Ile Leu Cys Leu Leu Leu Gly Val Leu Asn Leu Glu Thr Met 600

<210> 645

<211> 191

<212> PRT

<213> Homo sapiens

<400> 645

Met Ala Ala Pro Arg Gly Arg Ala Ala Pro Trp Thr Thr Ala Leu Leu

1 5 10 15

Leu Leu Leu Ala Ser Gln Val Leu Ser Pro Gly Ser Cys Ala Asp Glu 20 25 30

Glu Glu Val Pro Glu Glu Trp Val Leu Leu His Val Val Gln Gly Gln
35 40 45

Ile Gly Ala Gly Asn Tyr Ser Tyr Leu Arg Leu Asn His Glu Gly Lys

50 55 60

Ile Val Leu Arg Met Arg Ser Leu Lys Gly Asp Ala Asp Leu Tyr Val 65 70 75 80

Ser Ala Ser Ser Leu His Pro Ser Phe Asp Asp Tyr Glu Leu Gln Ser 85 90 95

Ala Thr Cys Gly Pro Asp Ala Val Ser Ile Pro Ala His Phe Arg Arg 100 105 110

Pro Val Gly Ile Gly Val Tyr Gly His Pro Ser His Leu Glu Ser Glu 115 120 125

Phe Glu Met Lys Val Tyr Tyr Asp Gly Thr Val Glu Gln His Pro Phe 130 135 140

Gly Glu Ala Ala Tyr Pro Ala Asp Gly Ala Asp Ala Gly Gln Lys His 145 150 155 160

Ala Gly Ala Pro Glu Asp Ala Ser Gln Glu Glu Glu Ser Val Leu Trp 165 170 175

Thr Ile Leu Ile Ser Ile Leu Lys Leu Glu Leu Glu Ile Leu Phe 180 185 190

<210> 646

<211> 421

<212> PRT

<213> Homo sapiens

<400> 646

Met Thr Val Phe Phe Lys Thr Leu Arg Asn His Trp Lys Lys Thr Thr 1 5 10 15

Ala Gly Leu Cys Leu Leu Thr Trp Gly Gly His Trp Leu Tyr Gly Lys
20 25 30

His Cys Asp Asn Leu Leu Arg Arg Ala Ala Cys Gln Glu Ala Gln Val 35 40 45

Phe Gly Asn Gln Leu Ile Pro Pro Asn Ala Gln Val Lys Lys Ala Thr 50 55 60

Val Phe Ser Ile Leu Gln Leu Ala Lys Glu Lys Pro Gly Leu Tyr Leu 65 70 75 80

Lys Lys Met Leu Pro Asp Phe Thr Phe Ile Trp His Gly Cys Asp Tyr 85 90 95

Cys Lys Thr Asp Tyr Glu Gly Gln Ala Lys Lys Leu Leu Glu Leu Met 100 105 110

Glu Asn Thr Asp Val Ile Ile Val Ala Gly Gly Asp Gly Thr Leu Gln 115 120 125

Glu Val Val Thr Gly Val Leu Arg Arg Thr Asp Glu Ala Thr Phe Ser 130 135 140

Lys Ile Pro Ile Gly Phe Ile Pro Leu Gly Glu Thr Ser Ser Leu Ser 145 His Thr Leu Phe Ala Glu Ser Gly Asn Lys Val Gln His Ile Thr Asp 170 165 Ala Thr Leu Ala Ile Val Lys Gly Glu Thr Val Pro Leu Asp Val Leu 185 Gln Ile Lys Gly Glu Lys Glu Gln Pro Val Phe Ala Met Thr Gly Leu 200 Arg Trp Gly Ser Phe Arg Asp Ala Gly Val Lys Val Ser Lys Tyr Trp Tyr Leu Gly Pro Leu Lys Ile Lys Ala Ala His Phe Phe Ser Thr Leu 235 Lys Glu Trp Pro Gln Thr His Gln Ala Ser Ile Ser Tyr Thr Gly Pro 250 Thr Glu Arg Pro Pro Asn Glu Pro Glu Glu Thr Pro Val Gln Arg Pro Ser Leu Tyr Arg Arg Ile Leu Arg Arg Leu Ala Ser Tyr Trp Ala Gln 280 Pro Gln Asp Ala Leu Ser Gln Glu Val Ser Pro Glu Val Trp Lys Asp Val Gln Leu Ser Thr Ile Glu Leu Ser Ile Thr Thr Arg Asn Asn Gln 315 310 Leu Asp Pro Thr Ser Lys Glu Asp Phe Leu Asn Ile Cys Ile Glu Pro Asp Thr Ile Ser Lys Gly Asp Phe Ile Thr Ile Gly Ser Arg Lys Val 345 Arg Asn Pro Lys Leu His Val Glu Gly Thr Glu Cys Leu Gln Ala Ser

Asp Ser Glu Glu Tyr Glu Ala Met Pro Val Glu Val Lys Leu Leu Pro 385 390 395 400

Gln Cys Thr Leu Leu Ile Pro Glu Gly Ala Gly Gly Ser Phe Ser Ile

375

Arg Lys Leu Gln Phe Phe Cys Asp Pro Arg Lys Arg Glu Gln Met Leu 405 410 415

Thr Ser Pro Thr Gln 420

<210> 647

<211> 79

<212> PRT

<213> Homo sapiens

<400> 647

Met Asn Tyr Ser Arg Ser Pro Trp Ala Ala Val Met Glu Pro Leu Thr
1 5 10 15

Leu Leu Phe Leu His Leu Ser Cys Leu Leu Ser Leu Cys Glu Ala Val 20 25 30

Gly Trp Asp Ser Glu Cys Leu Val Cys Ser Leu Gly Glu Glu Glu Phe 35 40 45

Leu Arg Met Gln Ala Leu Leu Cys Gly Cys Arg Leu His Leu Gly Gly 50 55 60

Val Leu Tyr Val Cys Thr Leu Gly Thr Ala Cys Ile Trp Lys Ile 65 70 75

<210> 648

<211> 242

<212> PRT

<213> Homo sapiens

<400> 648

Met Gln Leu Gly Ser Val Leu Leu Thr Arg Cys Pro Phe Trp Gly Cys

1 10 15

Phe Ser Gln Leu Met Leu Tyr Ala Glu Arg Ala Glu Ala Arg Arg Lys
20 25 30

Pro Asp Ile Pro Val Pro Tyr Leu Tyr Phe Asp Met Gly Ala Ala Val 35 40 45

Leu Cys Ala Ser Phe Met Ser Phe Gly Val Lys Arg Arg Trp Phe Ala 50 55 60

Leu Gly Ala Ala Leu Gln Leu Ala Ile Ser Thr Tyr Ala Ala Tyr Ile 65 70 75 80

Gly Gly Tyr Val His Tyr Gly Asp Trp Leu Lys Val Arg Met Tyr Ser 85 90 95

Arg Thr Val Ala Ile Ile Gly Gly Phe Leu Val Leu Ala Ser Gly Ala 100 105 110

Gly Glu Leu Tyr Arg Arg Lys Pro Arg Ser Arg Ser Leu Gln Ser Thr 115 120 125

Gly Gln Val Phe Leu Gly Ile Tyr Leu Ile Cys Val Ala Tyr Ser Leu 130 135 140

Gln His Ser Lys Glu Asp Arg Leu Ala Tyr Leu Asn His Leu Pro Gly 145 150 155 160

Gly Glu Leu Met Ile Gln Leu Phe Phe Val Leu Tyr Gly Ile Leu Ala 165 170 175

Leu Ala Phe Leu Ser Gly Tyr Tyr Val Thr Leu Ala Ala Gln Ile Leu 180 185 190

Ala Val Leu Leu Pro Pro Val Met Leu Leu Ile Asp Gly Asn Val Ala

195 200 205

Tyr Trp His Asn Thr Arg Arg Val Glu Phe Trp Asn Gln Met Lys Leu 210 215 220

Leu Gly Glu Ser Val Gly Ile Phe Gly Thr Ala Val Ile Leu Ala Thr 225 230 235 240

Asp Gly

<210> 649

<211> 52

<212> PRT

<213> Homo sapiens

<400> 649

Met Asp Ser Cys Leu Phe Leu Arg Asp Phe Cys Trp Lys Met Arg Met  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Leu Thr Ile Leu Pro Leu Gly Thr Leu Phe Pro Leu Leu Thr Leu Leu 20 25 30

Leu Leu Pro Leu Glu Val Pro Ser Val Ser Cys Gly Val Pro Phe Ala 35 40 45

Val Trp Asp Leu 50

<210> 650

<211> 189

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (94)

<223> Xaa equals any amino acid

<400> 650

Met Ala Leu Leu Ser Arg Pro Ala Leu Thr Leu Leu Leu Leu Met 1 5 10 15

Ala Ala Val Val Arg Cys Gln Glu Gln Ala Gln Thr Thr Asp Trp Arg  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Ala Thr Leu Lys Thr Ile Arg Asn Gly Val His Lys Ile Asp Thr Tyr 35 40 45

Leu Asn Ala Ala Leu Asp Leu Leu Gly Gly Glu Asp Gly Leu Cys Gln 50 55 60

Tyr Lys Cys Ser Asp Gly Ser Lys Pro Phe Pro Arg Tyr Gly Tyr Lys 65 70 75 80

Pro Ser Pro Pro Asn Gly Cys Gly Ser Pro Leu Phe Gly Xaa His Leu 85 90 95

Asn Ile Gly Ile Pro Ser Leu Thr Lys Cys Cys Asn Gln His Asp Arg 100 105 110

Cys Tyr Glu Thr Cys Gly Lys Ser Lys Asn Asp Cys Asp Glu Glu Phe 115 120 125

Gln Tyr Cys Leu Ser Lys Ile Cys Arg Asp Val Gln Lys Thr Leu Gly 130 135 140

Leu Thr Gln His Val Gln Ala Cys Glu Thr Thr Val Glu Leu Leu Phe 145 150 155 160

Asp Ser Val Ile His Leu Gly Cys Lys Pro Tyr Leu Asp Ser Gln Arg 165 170 175

Ala Ala Cys Arg Cys His Tyr Glu Glu Lys Thr Asp Leu 180 185

<210> 651

<211> 264

<212> PRT

<213> Homo sapiens

<400> 651

Met Leu Arg Cys Gly Gly Arg Gly Leu Leu Leu Gly Leu Ala Val Ala

1 10 15

Ala Ala Ala Val Met Ala Ala Arg Leu Met Gly Trp Trp Gly Pro Arg
20 25 30

Ala Gly Phe Arg Leu Phe Ile Pro Glu Glu Leu Ser Arg Tyr Arg Gly
35 40 45

Gly Pro Gly Asp Pro Gly Leu Tyr Leu Ala Leu Leu Gly Arg Val Tyr
50 55 60

Asp Val Ser Ser Gly Arg Arg His Tyr Glu Pro Gly Ser His Tyr Ser 65 70 75 80

Gly Phe Ala Gly Arg Asp Ala Ser Arg Ala Phe Val Thr Gly Asp Cys 85 90 95

Ser Glu Ala Gly Leu Val Asp Asp Val Ser Asp Leu Ser Ala Ala Glu 100 105 110

Met Leu Thr Leu His Asn Trp Leu Ser Phe Tyr Glu Lys Asn Tyr Val 115 120 125

Cys Val Gly Arg Val Thr Gly Arg Phe Tyr Gly Glu Asp Gly Leu Pro 130 135 140

Thr Pro Ala Leu Thr Gln Val Glu Ala Ala Ile Thr Arg Gly Leu Glu 145 150 155 160

Ala Asn Lys Leu Gln Leu Gln Glu Lys Gln Thr Phe Pro Pro Cys Asn 165 170 175

Ala Glu Trp Ser Ser Ala Arg Gly Ser Arg Leu Trp Cys Ser Gln Lys

180 185 190

Ser Gly Gly Val Ser Arg Asp Trp Ile Gly Val Pro Arg Lys Leu Tyr 195 200 205

Lys Pro Gly Ala Lys Glu Pro Arg Cys Val Cys Val Arg Thr Thr Gly 210 215 220

Pro Pro Ser Gly Gln Met Pro Asp Asn Pro Pro His Arg Asn Arg Gly 225 235 240

Asp Leu Asp His Pro Asn Leu Ala Glu Tyr Thr Gly Cys Pro Pro Leu 245 250 255

Ala Ile Thr Cys Ser Phe Pro Leu 260

<210> 652

<211> 140

<212> PRT

<213> Homo sapiens

<400> 652

Met Leu Gly Thr Ser Leu Ile Tyr Trp Thr Leu Phe Thr Leu Gly Leu
1 5 10 15

Asp Leu Ser Trp Ser Ile Ser Leu Ala Phe Lys Trp Cys Glu Arg Pro 20 25 30

Glu Trp Ile His Val Asp Ser Arg Pro Phe Ala Ser Leu Ser Arg Asp 35 40 45

Ser Gly Ala Ala Leu Gly Leu Gly Ile Ala Leu His Ser Pro Cys Tyr 50 55 60

Ala Gln Val Arg Arg Ala Gln Leu Gly Asn Gly Gln Lys Ilé Ala Cys 65 70 75 80

Leu Val Leu Ala Met Gly Leu Leu Gly Pro Leu Asp Trp Leu Gly His
85 90 95

Pro Pro Gln Ile Ser Leu Phe Tyr Ile Phe Asn Phe Leu Lys Tyr Thr  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$ 

Leu Trp Pro Cys Leu Val Leu Ala Leu Val Pro Trp Ala Val His Met 115 120 125

Phe Ser Ala Gln Glu Ala Pro Pro Ile His Ser Ser 130 135 140

<210> 653

<211> 248

<212> PRT

<213> Homo sapiens

<400> 653

Met Gly Pro Val Arg Leu Gly Ile Leu Leu Phe Leu Phe Leu Ala Val His Glu Ala Trp Ala Gly Met Leu Lys Glu Glu Asp Asp Asp Thr Glu Arg Leu Pro Ser Lys Cys Glu Val Cys Lys Leu Leu Ser Thr Glu Leu Gln Ala Glu Leu Ser Arg Thr Gly Arg Ser Arg Glu Val Leu Glu Leu 55 Gly Gln Val Leu Asp Thr Gly Lys Arg Lys Arg His Val Pro Tyr Ser Val Ser Glu Thr Arg Leu Glu Glu Ala Leu Glu Asn Leu Cys Glu Arg Ile Leu Asp Tyr Ser Val His Ala Glu Arg Lys Gly Ser Leu Arg Tyr 105 Ala Lys Gly Gln Ser Gln Thr Met Ala Thr Leu Lys Gly Leu Val Gln 120 Lys Gly Val Lys Val Asp Leu Gly Ile Pro Leu Glu Leu Trp Asp Glu 135 Pro Ser Val Glu Val Thr Tyr Leu Lys Lys Gln Cys Glu Thr Met Leu 150 Glu Glu Phe Glu Asp Ile Val Gly Asp Trp Tyr Phe His His Gln Glu

165 170 175

Gln Pro Leu Gln Asn Phe Leu Cys Glu Gly His Val Leu Pro Ala Ala 180 185 190

Glu Thr Ala Cys Leu Gln Glu Thr Trp Thr Gly Lys Glu Ile Thr Asp 195 200 205

Glu Glu Glu Glu Gly Gly Asp Lys Met Thr Lys Thr Gly Ser His 225 230 235 240

Pro Lys Leu Asp Arg Glu Asp Leu 245

<210> 654

<211> 64

<212> PRT

<213> Homo sapiens

<400> 654

Met Pro Leu Phe Leu Phe Val Ala His Leu Ile Ser Leu Leu Leu Ala 1 5 10 15

Phe Arg Arg Pro Pro Ala Ser Gln Ile Thr Pro Arg Ala Trp Thr Thr 20 25 30

Glu Ile Ala Ser Cys Glu Ser Val Glu Met Val Lys Ala Leu Ser Ser 35 40 45

Leu Arg Ser Arg Ala Gln Val Asn Ala Asp Phe Pro Gly His Leu Cys 50 60

<210> 655

<211> 385

<212> PRT

<213> Homo sapiens

<400> 655

Met Ser Phe Ile Met Lys Leu His Arg His Phe Gln Arg Thr Val Ile 1 5 10 15

Leu Leu Ala Thr Phe Cys Met Val Ser Ile Ile Ile Ser Ala Tyr Tyr
20 25 30

Leu Tyr Ser Gly Tyr Lys Gln Glu Asn Glu Leu Ser Glu Thr Ala Ser 35 40 45

Glu Val Asp Cys Gly Asp Leu Gln His Leu Pro Tyr Gln Leu Met Glu 50 55 60

Val Lys Ala Met Lys Leu Phe Asp Ala Ser Arg Thr Asp Pro Thr Val 65 70 75 80

Leu Val Phe Val Glu Ser Gln Tyr Ser Ser Leu Gly Gln Asp Ile Ile
85 90 95

Met Ile Leu Glu Ser Ser Arg Phe Gln Tyr His Ile Glu Ile Ala Pro 100 105 110

Gly Lys Gly Asp Leu Pro Val Leu Ile Asp Lys Met Lys Gly Lys Tyr 115 120 125

Ile Leu Ile Ile Tyr Glu Asn Ile Leu Lys Tyr Ile Asn Met Asp Ser 130 135 140

Trp Asn Arg Ser Leu Leu Asp Lys Tyr Cys Val Glu Tyr Gly Val Gly 145 150 155 160

Val Ile Gly Phe His Lys Thr Ser Glu Lys Ser Val Gln Ser Phe Gln 165 170 175

Leu Lys Gly Phe Pro Phe Ser Ile Tyr Gly Asn Leu Ala Val Lys Asp 180 185 190

Cys Cys Ile Asn Pro His Ser Pro Leu Ile Arg Val Thr Lys Ser Ser 195 200 205

Lys Leu Glu Lys Gly Ser Leu Pro Gly Thr Asp Trp Thr Val Phe Gln 210 215 220

Ile Asn His Ser Ala Tyr Gln Pro Val Ile Phe Ala Lys Val Lys Thr

225 230 235 240

Pro Glu Asn Leu Ser Pro Ser Ile Ser Lys Gly Ala Phe Tyr Ala Thr 245 250 255

Ile Ile His Asp Leu Gly Leu His Asp Gly Ile Gln Arg Val Leu Phe 260 265 270

Gly Asn Asn Leu Asn Phe Trp Leu His Lys Leu Ile Phe Ile Asp Ala 275 280 285

Ile Ser Phe Leu Ser Gly Lys Arg Leu Thr Leu Ser Leu Asp Arg Tyr 290 295 300

Ile Leu Val Asp Ile Asp Asp Ile Phe Val Gly Lys Glu Gly Thr Arg 305 310 315 320

Met Asn Thr Asn Asp Val Lys Val Arg Leu Tyr Phe Leu Lys Phe Gln 325 330 335

Ser Ser Val His Leu Pro Ala Gly Ile Gln Leu Ser Gln Phe Val Leu 340 345 350

Gln Leu Gly Tyr Pro Gly His Gly Ile Tyr Trp Glu Ser Leu Gly Asn 355 360 365

Leu Gly Leu Ser Leu Thr Leu Asn Gln Leu Arg Arg Leu Cys Ile Ser 370 380 380

Ile 385

<210> 656

<211> 53

<212> PRT

<213> Homo sapiens

<400> 656

Met Leu Val Phe Leu Leu Phe Ser Thr Val Thr Val Leu Cys Leu 1 5 10 15

Lys Val Val Phe Ser Leu Lys Ala Val Ala Tyr Ile Val Lys Asn Glu 20 25 30

Gly Leu Cys Leu Lys Phe Ile Ala Leu Gln Arg Val Val Ser Leu Lys 35 40 45

Ser Cys Thr Ile Lys 50

<210> 657

<211> 49

<212> PRT

<213> Homo sapiens

<400> 657

Met Asn Leu Leu Gly Met Ile Phe Ser Met Cys Gly Leu Met Leu Lys

1 5 10 15

Leu Lys Trp Cys Ala Trp Val Ala Val Tyr Cys Ser Phe Ile Ser Phe 20 25 30

Ala Asn Ser Arg Ser Ser Glu Asp Thr Lys Gln Met Met Ser Ser Phe 35 40 45

Met

<210> 658

<211> 110

<212> PRT

<213> Homo sapiens

<400> 658

Met Thr Val Ser Tyr Phe Trp Trp Leu Arg Val Gly Ala Trp Ala Glu
1 5 10 15

Asp Val Glu Ala Leu Ala Ser Leu Pro Glu Asp Arg Leu Arg Trp Asn 20 25 30

Leu Leu Ala Leu Pro Ala Ser Pro Cys Ala Val Thr Ala Leu Val Ala 35 40 45

Arg His Arg Arg Ala Gly Leu Gln Arg Ser Ile Gln Cys Leu Leu Gly 50 60

Arg Gln Gly Gly Gly Cys Asn Cys Glu Leu Thr Lys Pro Gln Val 65 70 75 80

Gly Ser Lys Trp Val Gly His Arg Lys Lys Ser Asp Leu Gln Ser Gly 85 90 95

Asp Leu Gly Ser Gly Leu Cys Leu Met Thr Gly Ser Val Met 100 105 110

<210> 659

<211> 258

<212> PRT

<213> Homo sapiens

<400> 659

Met Tyr Ile Trp Phe Ile Ile Phe Phe Ile Gln Pro His Lys Glu Glu 1 5 10 15

Arg Phe Leu Phe Pro Val Tyr Pro Leu Ile Cys Leu Cys Gly Ala Val 20 25 30

Ala Leu Ser Ala Leu Gln Lys Cys Tyr His Phe Val Phe Gln Arg Tyr
35 40 45

Arg Leu Glu His Tyr Thr Val Thr Ser Asn Trp Leu Ala Leu Gly Thr 50 60

Val Phe Leu Phe Gly Leu Leu Ser Phe Ser Arg Ser Val Ala Leu Phe

65 70 75 80

Arg Gly Tyr His Gly Pro Leu Asp Leu Tyr Pro Glu Phe Tyr Arg Ile 85 90 95

Ala Thr Asp Pro Thr Ile His Thr Val Pro Glu Gly Arg Pro Val Asn 100 105 110

Val Cys Val Gly Lys Glu Trp Tyr Arg Phe Pro Ser Ser Phe Leu Leu 115 120 125

Pro Asp Asn Trp Gln Leu Gln Phe Ile Pro Ser Glu Phe Arg Gly Gln 130 135 140

Leu Pro Lys Pro Phe Ala Glu Gly Pro Leu Ala Thr Arg Ile Val Pro 145 150 155 160

Thr Asp Met Asn Asp Gln Asn Leu Glu Glu Pro Ser Arg Tyr Ile Asp 165 170 175

Ile Ser Lys Cys His Tyr Leu Val Asp Leu Asp Thr Met Arg Glu Thr 180 185 190

Pro Arg Glu Pro Lys Tyr Ser Ser Asn Lys Glu Glu Trp Ile Ser Leu 195 200 205

Ala Tyr Arg Pro Phe Leu Asp Ala Ser Arg Ser Ser Lys Leu Leu Arg 210 215 220

Ala Phe Tyr Val Pro Phe Leu Ser Asp Gln Tyr Thr Val Tyr Val Asn 225 230 235 240

Tyr Thr Ile Leu Lys Pro Arg Lys Ala Lys Gln Ile Arg Lys Lys Ser 245 250 255

Gly Gly

<210> 660

<211> 59

<212> PRT

<213> Homo sapiens

<400> 660

Met Asn Ser Thr Leu Cys Val Val Leu Ser Leu Met Cys Met Asn Ser

Thr Leu Cys Val Val Leu Ser Leu Thr His Ser Cys Pro Ser Pro Gln 20 25 30

Val Pro Lys Val His Tyr Met Ile Phe Met Pro Leu His Leu His Ser 35 40 45

Leu Ala Leu Thr Gln Leu Ile Ile Ile Tyr Lys 50 55

<210> 661

<211> 202

<212> PRT

<213> Homo sapiens

<400> 661

Met Ser Leu Leu Val Asp Gly Asp Met Asn Leu Ser Ile Ile Met Thr 1 5 10

Ile Ser Ser Thr Leu Leu Ala Leu Val Leu Met Pro Leu Cys Leu Trp
20 25 30

Ile Tyr Ser Trp Ala Trp Ile Asn Thr Pro Ile Val Gln Leu Leu Pro
35 40 45

Leu Gly Thr Val Thr Leu Thr Leu Cys Ser Thr Leu Ile Pro Ile Gly 50 55 60

Leu Gly Val Phe Ile Arg Tyr Lys Tyr Ser Arg Val Ala Asp Tyr Ile 65 70 75 80

Val Lys Val Ser Leu Trp Ser Leu Leu Val Thr Leu Val Val Leu Phe
85 90 95

Ile Met Thr Gly Thr Met Leu Gly Pro Glu Leu Leu Ala Ser Ile Pro 100 105 110

Ala Ala Val Tyr Val Ile Ala Ile Phe Met Pro Leu Ala Gly Tyr Ala 115 120 125

Ser Gly Tyr Gly Leu Ala Thr Leu Phe His Leu Pro Pro Asn Cys Lys 130 135 140

Arg Thr Val Cys Leu Glu Thr Gly Ser Gln Asn Val Gln Leu Cys Thr 145 150 155 160

Ala Ile Leu Lys Leu Ala Phe Pro Pro Gln Phe Ile Gly Ser Met Tyr 165 170 175

Met Phe Pro Leu Leu Tyr Ala Leu Phe Gln Ser Ala Glu Ala Gly Ile 180 185 190

Phe Val Leu Ile Tyr Lys Met Tyr Gly Arg

<210> 662

<211> 80

<212> PRT

<213> Homo sapiens

<400> 662

Met Ala Leu Gly Ser Met Tyr Leu Val Leu Thr Leu Ile Val Ala Lys

1 10 15

Val Leu Arg Gly Ala Glu Pro Cys Cys Gly Pro Leu Lys Asn Arg Val 20 25 30

Leu Arg Pro Cys Pro Leu Pro Val His Cys Pro Leu Pro Ile Pro Ser 35 40 45

Pro Ala Glu Gly Ile Pro Trp Val Ala Tyr Leu Pro Ile Arg Trp Phe 50 55 60

Ile Ser Cys Cys Pro Gly His Cys Ile Gln Ile Pro Met Cys Thr Ser
65 70 75 80

<210> 663

<211> 240

<212> PRT

<213> Homo sapiens

<400> 663

Met Gly Asn Cys Gln Ala Gly His Asn Leu His Leu Cys Leu Ala His 1 5 10 15

His Pro Pro Leu Val Cys Ala Thr Leu Ile Leu Leu Leu Gly Leu 20 25 30

Ser Gly Leu Gly Ser Phe Leu Leu Thr His Arg Thr Gly Leu 35 40 45

Arg Ser Pro Asp Ile Pro Gln Asp Trp Val Ser Phe Leu Arg Ser Phe 50 55 60

Gly Gln Leu Thr Leu Cys Pro Arg Asn Gly Thr Val Thr Gly Lys Trp 65 70 75 80

Arg Gly Ser His Val Val Gly Leu Leu Thr Thr Leu Asn Phe Gly Asp 85 90 95

Gly Pro Asp Arg Asn Lys Thr Arg Thr Phe Gln Ala Thr Val Leu Gly
100 105 110

Ser Gln Met Gly Leu Lys Gly Ser Ser Ala Gly Gln Leu Val Leu Ile 115 120 125

Thr Ala Arg Val Thr Thr Glu Arg Thr Ala Gly Thr Cys Leu Tyr Phe 130 135 140

Ser Ala Val Pro Gly Ile Leu Pro Ser Ser Gln Pro Pro Ile Ser Cys 145 150 155 160

Ser Glu Glu Gly Ala Gly Asn Ala Thr Leu Ser Pro Arg Met Gly Glu 165 170 175

Glu Cys Val Ser Val Trp Ser His Glu Gly Leu Val Leu Thr Lys Leu 180 185 190

Leu Thr Ser Glu Glu Leu Ala Leu Cys Gly Ser Arg Leu Leu Val Leu 195 200 205

Gly Ser Phe Leu Leu Leu Phe Cys Gly Leu Leu Cys Cys Val Thr Ala 210 215 220

Met Cys Phe His Pro Arg Arg Glu Ser His Trp Ser Arg Thr Arg Leu 225 230 235 240

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<210> 664
<211> 39
<212> PRT
<213> Homo sapiens
<400> 664
Met Leu Leu Leu Lys Thr Leu Phe Val Thr Phe Trp Ser Thr Asn
Leu Ser Ile Thr Phe Ser Asn Tyr Asn Val Lys Leu Tyr Gln Trp Gln
Ser Tyr Ile Val Asn Gly Ser
       35
<210> 665
<211> 146
<212> PRT
<213> Homo sapiens
<400> 665
Met Leu Met Pro Val His Phe Leu Leu Leu Leu Leu Leu Leu Gly
                                    10
Gly Pro Arg Thr Gly Leu Pro His Lys Phe Tyr Lys Ala Lys Pro Ile
                                25
Phe Ser Cys Leu Asn Thr Ala Leu Ser Glu Ala Glu Lys Gly Gln Trp
                            40
Glu Asp Ala Ser Leu Leu Ser Lys Arg Ser Phe His Tyr Leu Arg Ser
                       55
Arg Asp Ala Ser Ser Gly Glu Glu Glu Glu Gly Lys Glu Lys Lys Thr
Phe Pro Ile Ser Gly Ala Arg Gly Gly Ala Arg Gly Thr Arg Tyr Arg
Tyr Val Ser Gln Ala Gln Pro Arg Gly Lys Pro Arg Gln Asp Thr Ala
           100
Lys Ser Pro His Arg Thr Lys Phe Thr Leu Ser Leu Asp Val Pro Thr
                           120
```

Ala Gln 145

130

Asn Ile Met Asn Leu Leu Phe Asn Ile Ala Lys Ala Lys Asn Leu Arg

<210> 666

<211> 174

<212> PRT

<213> Homo sapiens

<400> 666

Met Glu Ala Pro Gly Pro Arg Ala Leu Arg Thr Ala Leu Cys Gly Gly
1 5 10 15

Cys Cys Cys Leu Leu Cys Ala Gln Leu Ala Val Ala Gly Lys Gly 20 25 30

Ala Arg Gly Phe Gly Arg Gly Ala Leu Ile Arg Leu Asn Ile Trp Pro 35 40 45

Ala Val Gln Gly Ala Cys Lys Gln Leu Glu Val Cys Glu His Cys Val 50 55 60

Glu Gly Asp Arg Ala Arg Asn Leu Ser Ser Cys Met Trp Glu Gln Cys 65 70 75 80

Arg Pro Glu Glu Pro Gly His Cys Val Ala Gln Ser Glu Val Val Lys 85 90 95

Glu Gly Cys Ser Ile Tyr Asn Arg Ser Glu Ala Cys Pro Ala Ala His 100 105 110

His His Pro Thr Tyr Glu Pro Lys Thr Val Thr Thr Gly Ser Pro Pro 115 120 125

Val Pro Glu Ala His Ser Pro Gly Phe Asp Gly Ala Ser Phe Ile Gly 130 135 140

Gly Val Val Leu Val Leu Ser Leu Gln Ala Val Ala Phe Phe Val Leu 145 150 155 160

His Phe Leu Lys Ala Lys Asp Ser Thr Tyr Gln Thr Leu Ile 165 170

<210> 667

<211> 199

<212> PRT

<213> Homo sapiens

<400> 667

Met Arg Arg Leu Leu Leu Ala Leu Pro Phe Ala Leu Leu Pro Leu Ala 1 5 10 15

Val Ala His Ala His Glu Asp His Asp His Glu His Gly Ser Leu Gly 20 25 30

Ala His Glu His Gly Val Gly Arg Leu Asn Ala Val Leu Asp Gly Gln 35 40 45

Ala Leu Glu Leu Glu Leu Asp Ser Pro Ala Met Asn Leu Val Gly Phe
50 60

Glu His Val Ala Thr Ser Ala Ala Asp Lys Ala Lys Val Ala Ala Val 65 70 75 80

Arg Lys Gln Leu Glu Asn Pro Ser Ala Leu Phe Asn Leu Pro Lys Ala 85 90 95

Ala Gly Cys Val Val Ser Ser Gln Glu Leu Asn Ser Pro Leu Phe Gly
100 105 110

Asp Lys Pro Glu Ala Glu His Asp Asp Asp Asp His Ala Ser Asp Gly
115 120 125

Lys Gly Ala Ala Ala His Lys His Asp His Asp His Ser Glu Ile His 130 135 140

Ala His Tyr Gln Phe Thr Cys Ala Thr Pro Thr Ala Leu Gly Asn Leu 145 150 155 160

Asp Leu Ser Gln Val Phe Lys Thr Phe Pro Ala Thr Gln Lys Ile Gln 165 170 175

Val Gln Leu Ile Gly Pro Ser Gly Gln Gln Gly Val Asp Ala Thr Ala 180 185 190

Thr Ala Ala Thr Leu Lys Phe 195

<210> 668

<211> 84

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (65)

<223> Xaa equals any amino acid

<400> 668

Met Trp Val Phe Phe Leu Pro Phe Phe Ser Ile Leu Phe Lys Ile Cys
1 5 10 15

Trp Cys Ile Ser Leu Ser Gln Thr Lys Glu Lys Gln Ser Ser Asn Leu 20 25 30

Met Phe Tyr Phe Phe Cys Ile Cys Thr Tyr Glu Arg Arg Lys Lys 35 40 45

Glu Met Arg Arg Gly Glu Lys Lys Arg Ser Phe Cys Leu Ile Gly Leu 50 55 60

Xaa Gln His Met Ile Ala Val Gln Ala Trp Phe His Glu Gln His Gln 65 70 75 80

Ile Gln Ile Ser

<210> 669

<211> 245

<212> PRT

<213> Homo sapiens

<400> 669

Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser 1 5 10 15

Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys
20 25 30

Lys Gly Glu Ala Gly Arg Pro Gly Arg Gly Arg Pro Gly Leu Lys
35 40 45

Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln 50 60

Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly 65 70 75 80

Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile 85 90 95

Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln 100 105 110

Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly
115 120 125

Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr 130 135 140

Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr 145 150 155 160

Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val 165 170 175

Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr 180 185 190

Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln 195 200 205

Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly 210 215 220

His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu 225 230 235 240

Ile Phe Pro Ser Ala 245

<210> 670

<211> 83

<212> PRT

<213> Homo sapiens

<400> 670

Met Gly Gln Cys Pro Gly Ser Arg Val Leu Pro Gln Leu Met Gln Leu 1 5 10 15

Trp Leu Leu Cys Ala Gln Ile Met Cys Leu Glu Ala Phe Leu Gln 20 25 30

Gln Gly Ser Val Arg Lys Trp Lys Ser Gly Val Ser Ser Phe Pro Gly 35 40 45

Glu Ser Leu Ala Glu Gln Leu Thr Leu Ser Lys His Cys Arg Trp Pro 50 60

Leu Phe Leu Pro Gly Ser Ser Ser Trp Glu Leu Ser Ala Pro Gly Lys 65 70 75 80

Phe Trp Gln

<210> 671

<211> 61

<212> PRT

<213> Homo sapiens

<400> 671

Met Tyr Leu Phe Leu Lys Thr Leu Leu Ser Phe Ser Thr Leu Met Met  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Thr Thr Ala Leu Ser Phe Met Val Ile Thr Val Leu Trp Val Leu Leu 20 25 30

Leu His Leu Leu Ala Asn Ile Cys Ile Pro Arg Lys Cys Ser Phe Ala 35 40 45

Cys Phe Tyr Ile Asn Gly Ile Leu Leu His Ala Val Phe 50 55 60

<210> 672

<211> 57

<212> PRT

<213> Homo sapiens

<400> 672

Met Ala Val Ser Val Ile Phe Cys Gln Lys Leu Lys Thr Gly Ser Val 1 5 10 15

Lys Leu Trp Ile Gln Met Leu Leu Trp Leu Gln Phe Ser Val Ala Cys  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Leu Arg Leu Arg Lys Gly Gly Lys Trp Ser Pro Trp Gly Leu Met Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Lys Glu Val Ile Trp Lys Asp Cys Arg
50 55

<210> 673

<211> 83

<212> PRT

<213> Homo sapiens

<400> 673

Met Leu Ser Leu Phe Phe Cys Phe Trp Lys Pro Ser Phe Leu Val Ser 1 5 10 15

Arg Leu Val Ile Trp Leu Gly Leu Val Cys Gly Gly Arg Ser Leu Ser 20 25 30

Trp Val Ala Leu Gly Glu Asp Tyr Leu Gly Thr Pro Ile Leu Ile Pro
35 40 45

Asn Ile His Gln Thr Cys Pro His Pro Pro Leu Trp Glu Leu Val Pro 50 55 60

Glu His Pro Cys Arg Leu Val Leu Ile Phe Ser Leu Cys Glu His Thr 65 70 75 80

His Ile Arg

<210> 674

<211> 56

<212> PRT

<213> Homo sapiens

<400> 674

Met Phe Lys Arg Met Cys Phe Phe Phe Gln Val Phe Leu Pro Leu Ala 1 5 10 15

Cys Thr Glu Leu Leu Trp Lys Gly Ala Pro Cys Arg His Ile Phe Gln 20 25 30

Thr Gly Pro Asp Leu Leu Val Thr Gln Arg Cys Val His Ser Leu Leu 35 40 45

Leu Gly Tyr Leu Ile Ser Ile Phe 50 55

<210> 675

<211> 319

<212> PRT

<213> Homo sapiens

<400> 675

Met Ser Trp Cys Cys Leu Trp Leu Cys Leu Ser Ser Val Gly Arg Thr 1 5 . 10 15

Gly Ser Ala Gly Pro Ser Leu Pro Phe Ser Glu Leu Cys Ser Leu Gly
20 25 30

Leu Leu Arg Leu Arg Pro Val Phe Ser Pro Leu His Ser Gly Pro Gly
35 45

Lys Pro Ala Gln Phe Leu Ala Gly Glu Ala Glu Glu Val Asn Ala Phe 50 55 60

Ala Leu Gly Phe Leu Ser Thr Ser Ser Gly Val Ser Gly Glu Asp Glu Val Glu Pro Leu His Asp Gly Val Glu Glu Ala Glu Lys Lys Met Glu Glu Glu Gly Val Ser Val Ser Glu Met Glu Ala Thr Gly Ala Gln Gly Pro Ser Arg Val Glu Glu Ala Glu Gly His Thr Glu Val Thr Glu Ala Glu Gly Ser Gln Gly Thr Ala Glu Ala Asp Gly Pro Gly Ala Ser Ser Gly Asp Glu Asp Ala Ser Gly Arg Ala Ala Ser Pro Glu Ser Ala Ser 155 150 Ser Thr Pro Glu Ser Leu Gln Ala Arg Arg His His Gln Phe Leu Glu 170 165 Pro Ala Pro Ala Pro Gly Ala Ala Val Leu Ser Ser Glu Pro Ala Glu 180 185 Pro Leu Leu Val Arg His Pro Pro Arg Pro Arg Thr Thr Gly Pro Arg 200 ...Pro Arg Gln Asp Pro His Lys Ala Gly Leu Ser His Tyr Val Lys Leu .... 215 Phe Ser Phe Tyr Ala Lys Met Pro Met Glu Arg Lys Ala Leu Glu Met 230 235 Val Glu Lys Cys Leu Asp Lys Tyr Phe Gln His Leu Cys Asp Asp Leu 245 250 Glu Val Phe Ala Ala His Ala Gly Arg Lys Thr Val Lys Pro Glu Asp 265 Leu Glu Leu Leu Met Arg Arg Gln Gly Leu Val Thr Asp Gln Val Ser 280 Leu His Val Leu Val Glu Arg His Leu Pro Leu Glu Tyr Arg Gln Leu 295 300 Leu Ile Pro Cys Ala Tyr Ser Gly Asn Ser Val Phe Pro Ala Gln 310

<210> 676

<211> 336

<212> PRT

<213> Homo sapiens

<400> 676

Met Ile Ser Tyr Ile Val Leu Leu Ser Ile Leu Leu Trp Pro Leu Val

Val Tyr His Glu Leu Ile Gln Arg Met Tyr Thr Arg Leu Glu Pro Leu 20 25 30

Leu Met Gln Leu Asp Tyr Ser Met Lys Ala Glu Ala Asn Ala Leu His His Lys His Asp Lys Arg Lys Arg Gln Gly Lys Asn Ala Pro Pro Gly Gly Asp Glu Pro Leu Ala Glu Thr Glu Ser Glu Ser Glu Ala Glu Leu Ala Gly Phe Ser Pro Val Val Asp Val Lys Lys Thr Ala Leu Ala Leu Ala Ile Thr Asp Ser Glu Leu Ser Asp Glu Glu Ala Ser Ile Leu Glu Ser Gly Gly Phe Ser Val Ser Arg Ala Thr Thr Pro Gln Leu Thr Asp Val Ser Glu Asp Leu Asp Gln Gln Ser Leu Pro Ser Glu Pro Glu Glu Thr Leu Ser Arg Asp Leu Gly Glu Gly Glu Gly Glu Leu Ala Pro Pro Glu Asp Leu Leu Gly Arg Pro Gln Ala Leu Ser Arg Gln Ala Leu Asp Ser Glu Glu Glu Glu Asp Val Ala Ala Lys Glu Thr Leu Leu 185 Arg Leu Ser Ser Pro Leu His Phe Val Asn Thr His Phe Asn Gly Ala 200 Gly Ser Pro Gln Asp Gly Val Lys Cys Ser Pro Gly Gly Pro Val Glu 215 Thr Leu Ser Pro Glu Thr Val Ser Gly Gly Leu Thr Ala Leu Pro Gly Thr Leu Ser Pro Pro Leu Cys Leu Val Gly Ser Asp Pro Ala Pro Ser Pro Ser Ile Leu Pro Pro Val Pro Gln Asp Ser Pro Gln Pro Leu Pro 265 Ala Pro Glu Glu Glu Glu Ala Leu Thr Thr Glu Asp Phe Glu Leu Leu Asp Gln Gly Glu Leu Glu Gln Leu Asn Ala Glu Leu Gly Leu Glu Pro 295 Glu Thr Pro Pro Lys Pro Pro Asp Ala Pro Pro Leu Gly Pro Asp Ile His Ser Leu Val Gln Ser Asp Gln Glu Ala Gln Ala Val Ala Glu Pro 325 330

<210> 677

<211> 272

<212> PRT

<213> Homo sapiens

<400> 677

Met Trp Gly Asn Lys Phe Gly Val Leu Leu Phe Leu Tyr Ser Val Leu 1 5 10 15

Leu Thr Lys Gly Ile Glu Asn Ile Lys Asn Glu Ile Glu Asp Ala Ser 20 25 30

Glu Pro Leu Ile Asp Pro Val Tyr Gly His Gly Ser Gln Ser Leu Ile 35 40 45

Asn Leu Leu Thr Gly His Ala Val Ser Asn Val Trp Asp Gly Asp 50 55 60

Arg Glu Cys Ser Gly Met Lys Leu Leu Gly Ile His Glu Gln Ala Ala 65 70 75 80

Val Gly Phe Leu Thr Leu Met Glu Ala Leu Arg Tyr Cys Lys Val Gly 85 90 95

Ser Tyr Leu Lys Ser Pro Lys Phe Pro Ile Trp Ile Val Gly Ser Glu 100 105 110

Thr His Leu Thr Val Phe Phe Ala Lys Asp Met Ala Leu Val Ala Pro 115 120 125

Glu Ala Pro Ser Glu Gln Ala Arg Arg Val Phe Gln Thr Tyr Asp Pro 130 135 140

Glu Asp Asn Gly Phe Ile Pro Asp Ser Leu Leu Glu Asp Val Met Lys 145 150 155 160

Ala Leu Asp Leu Val Ser Asp Pro Glu Tyr Ile Asn Leu Met Lys Asn 165 170 175

Lys Leu Asp Pro Glu Gly Leu Gly Ile Ile Leu Leu Gly Pro Phe Leu 180 185 190

Gln Glu Phe Phe Pro Asp Gln Gly Ser Ser Gly Pro Glu Ser Phe Thr 195 200 205

Val Tyr His Tyr Asn Gly Leu Lys Gln Ser Asn Tyr Asn Glu Lys Val ... 210 220

Met Tyr Val Glu Gly Thr Ala Val Val Met Gly Phe Glu Asp Pro Met 225 230 235 240

Leu Gln Thr Asp Asp Thr Pro Ile Lys Arg Cys Leu Gln Thr Lys Trp
245 250 255

Pro Tyr Ile Glu Leu Leu Trp Thr Thr Asp Arg Ser Pro Ser Leu Asn 260 265 270

<210> 678 <211> 60 <212> PRT <213> Homo sapiens <400> 678

Met Val Ser Arg Ser Thr Ser Leu Thr Leu Ile Val Phe Leu Phe His 1 5 10 15

Arg Leu Ser Lys Ala Pro Gly Lys Met Val Glu Asn Ser Pro Ser Pro 20 25 30

Leu Pro Glu Arg Ala Ile Tyr Gly Phe Val Leu Phe Leu Ser Ser Gln 35 40 45

Phe Gly Phe Lys Asn Leu Lys Gly Ser Arg Val Cys 50 55 60

<210> 679 <211> 224 <212> PRT <213> Homo sapiens

<400> 679
Met Gly Ile Phe Pro Gly Ile Ile Leu Ile Phe Leu Arg Val Lys Phe
1 5 10 15

Ala Thr Ala Ala Val Ile Val Ser Gly His Gln Lys Ser Thr Thr Val 20 25 30

Ser His Glu Met Ser Gly Leu Asn Trp Lys Pro Phe Val Tyr Gly Gly 35 40 45

Leu Ala Ser Ile Val Ala Glu Phe Gly Thr Phe Pro Val Asp Leu Thr 50 55 60

Lys Thr Arg Leu Gln Val Gln Gly Gln Ser Ile Asp Ala Arg Phe Lys 65 70 75 80

Glu Ile Lys Tyr Arg Gly Met Phe His Ala Leu Phe Arg Ile Cys Lys 85 90 95

Glu Glu Gly Val Leu Ala Leu Tyr Ser Gly Ile Ala Pro Ala Leu Leu 100 105 110

Arg Gln Ala Ser Tyr Gly Thr Ile Lys Ile Gly Ile Tyr Gln Ser Leu 115 120 125

Lys Arg Leu Phe Val Glu Arg Leu Glu Asp Glu Thr Leu Leu Ile Asn 130 135 140

Met Ile Cys Gly Val Val Ser Gly Val Ile Ser Ser Thr Ile Ala Asn 145 150 155 160

Pro Thr Asp Val Leu Lys Ile Arg Met Gln Ala Gln Gly Ser Leu Phe 165 170 175

Gln Gly Ser Met Ile Gly Ser Phe Ile Asp Ile Tyr Gln Glu Gly 180 185 190

Thr Arg Gly Leu Trp Arg Val Ser Thr Leu Phe Leu Leu Ser Tyr 195 200 205

Thr Leu Ser Ser Tyr Asn Leu Gln Arg Ile Phe Phe Tyr Ile Lys Thr 210 215 220

<210> 680

<211> 89

<212> PRT

<213> Homo sapiens

<400> 680

Met Phe Lys Asp Tyr Pro Pro Ala Ile Lys Pro Ser Tyr Asp Val Leu 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Leu Gln Ala Gly Leu Asn Thr 20 25 30

Gly Thr Ala Ile Gln Cys Val Arg Phe Lys Val Ser Ala Arg Leu Gln 35 40 45

Gly Ala Ser Trp Asp Thr Gln Asn Gly Pro Gln Glu Arg Leu Ala Gly 50 55 60

Glu Val Ala Arg Ser Pro Leu Lys Glu Phe Asp Lys Glu Lys Ala Trp 65 70 75 80

Arg Ala Val Val Gln Met Ala Gln 85

<210> 681

<211> 31

<212> PRT

<213> Homo sapiens

<400> 681

Met Phe Ser Ser Lys Ser Leu Leu Val Leu Pro Phe Cys Phe Arg Ser

Ala Ala His Leu Glu Leu Ser Val Trp Cys Val Cys Gly Val Arg 20 25 30

<210> 682

<211> 106

<212> PRT

<213> Homo sapiens

<400> 682

Met Pro Gly Val Leu Gly Ala Leu Leu Gly Val Leu Val Ala Gly Leu
1 5 10 15

Ala Thr His Glu Ala Tyr Gly Asp Gly Leu Glu Ser Val Phe Pro Leu 20 25 30

The Ala Glu Gly Gln Arg Ser Ala Thr Ser Gln Ala Met His Gln Leu 35 40 45

Phe Gly Leu Phe Val Thr Leu Met Phe Ala Ser Val Gly Gly Leu 50 55 60

Gly Gly Ile Ile Leu Val Leu Cys Leu Leu Asp Pro Cys Ala Leu Trp 65 70 75 80

His Trp Val Ala Pro Ser Ser Met Val Gly Gly Arg Glu Ala Ser Gln 85 90 95

Ile Leu Pro Tyr His His Gln Gly Ser Cys 100 105

<210> 683

<211> 51

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (23)

<223> Xaa equals any amino acid

<400> 683

Met Ala Gln His His Leu Leu Ser Ile Leu Leu Ala Ile Leu Ser Cys

1 5 10 15

Ser Ser Gln Pro Arg Gln Xaa Arg Gly Ser Gly Ala Leu Pro Cys Glu 20 25 30

Val Cys Ser Ala Val Leu Leu Thr Cys Leu Arg Lys Ile Ser Gly Ser 35 40

Leu Cys Val

<210> 684

<211> 74

<212> PRT

<213> Homo sapiens

<400> 684

Met Leu His Leu Ala Ala Met Trp Trp Ala Cys Val Thr Thr Leu Val 1 5 10 15

Phe Thr Leu Val Ser Lys Leu Phe Ile Pro Leu Lys Ser Ser Met Asp 20 25 30

Gly Glu Met Ser Leu Asp Pro His Ser Cys Val Leu Val Cys Ile Cys

35 40 45

Phe Pro Leu Arg Phe Val Phe Val Ser Cys Phe Glu Leu Tyr Leu Val 50 55 60

Gln Ser Ile Val Lys Leu Ser Gln Gln Leu 65 70

<210> 685

<211> 88

<212> PRT

<213> Homo sapiens

<400> 685

Met Ala Ile Ile Ser Phe Glu Leu Leu Phe Leu Met Asn Leu Pro Thr 1 5 10 15

Val Asn Ser Ser Asn Phe Lys Leu Ile Ile Pro Glu Asp Val Thr Leu 20 25 30

Ser Phe Val Ser His Leu Asp Ile Thr Val Asn His Phe Val Phe Leu 35 40 45

Ser Thr Phe Glu Leu Ala Gly Val Ile Glu Gly Lys Pro Leu Pro Asp 50 55 60

Ser Lys Ser Asp Leu Cys Pro Ile Leu Gly Gln Leu Trp Phe His Ile 65 70 75 80

Leu Leu Phe Phe Ile Phe Trp Val

<210> 686

<211> 127

<212> PRT

<213> Homo sapiens

<400> 686

Met Gly Gln Val Trp Arg Val Pro Pro Leu Leu Leu Ser Val Gln Val 1 5 10 15

Phe Leu Thr Met Ala His Ala Phe His Gln Ala Pro Glu Leu Gln Trp 20 25 30

Leu Gly Leu Trp Phe Trp Val Arg Leu Phe Ala Gly Gly Asp Gly Gly 35 40 45

Leu His Leu Asn Ile Ser Ser Val Thr Leu Pro Leu Leu His Gly Lys 50 55 60

Gln Leu Ser Arg Glu Val Pro Ser Cys Gln Gly Lys Pro Arg Leu Gly 65 70 75 80

Arg Pro Pro Tyr Lys Glu Pro Gln Asp Cys Ser His Gly Cys His Leu 85 90 95

Ser Trp Lys Gly Arg Phe Met Gly Phe Pro Gly Thr Pro Arg Leu Ser

100 105 110

Trp Pro Arg Gly Lys Arg Trp Leu Leu Gln Glu Phe Asp Leu Ser 115 120 125

<210> 687

<211> 215

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (83)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (141)

<223> Xaa equals any amino acid

<400> 687

Met Tyr Gly Lys Ser Ser Thr Arg Ala Val Leu Leu Leu Gly Ile 1 5 10 15

Gln Leu Thr Ala Leu Trp Pro Ile Ala Ala Val Glu Ile Tyr Thr Ser 20 25 30

Arg Val Leu Glu Ala Val Asn Gly Thr Asp Ala Arg Leu Lys Cys Thr 35 40 45

Phe Ser Ser Phe Ala Pro Val Gly Asp Ala Leu Thr Val Thr Trp Asn 50 55 60

Phe Arg Pro Leu Asp Gly Gly Pro Glu Gln Phe Val Phe Tyr Tyr His 65 70 75 80

Ile Asp Xaa Phe Gln Pro Met Ser Gly Arg Phe Lys Asp Arg Val Ser 85 90 95

Trp Asp Gly Asn Pro Glu Arg Tyr Asp Ala Ser Ile Leu Leu Trp Lys
100 105 110

Leu Gln Phe Asp Asp Asn Gly Thr Tyr Thr Cys Gln Val Lys Asn Pro 115 120 125

Pro Asp Val Asp Gly Val Ile Gly Asp Ile Arg Leu Xaa Val Val His 130 135 140

Thr Val Arg Phe Ser Glu Ile His Phe Leu Ala Leu Ala Ile Gly Ser 145 150 155 160

Ala Cys Ala Leu Met Ile Ile Ile Val Ile Val Val Val Leu Phe Gln
165 170 175

His Tyr Arg Lys Lys Arg Trp Ala Glu Arg Ala His Lys Val Val Glu 180 185 190

Ile Lys Ser Lys Glu Glu Glu Arg Leu Asn Gln Glu Lys Lys Val Ser 195 200 205

Val Tyr Leu Glu Asp Thr Asp 210 215

<210> 688

<211> 158

<212> PRT

<213> Homo sapiens

<400> 688

Met Thr Thr Met Ala Pro Val Gly Leu Gln Thr Arg Ile Pro Trp Leu
1 5 10 15

Leu Cys Leu Gly Pro Pro Pro Gly Pro Cys Cys Pro Leu Ser Pro Thr 20 25 30

Ser Thr Leu Pro His Thr Pro Thr Ala Arg Ser Leu His Pro Thr Met  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Ser Phe His Leu Thr Pro Met Val Gly Ala Val Pro Ala Ala Ser Ile  $50 \hspace{1cm} 55 \hspace{1cm} 60$ 

Val Arg Ala Ala Gly Ala Val Gly Arg His Gly Val Met Gly Gln 65 70 75 80

Gly Ala Arg Gly Gly Pro Arg Ser Gly Pro Pro Ser Pro Ser Pro Ala

90 95

Val Ala Val Ser Leu Ser Pro Pro Ala Glu Gly Ala Ala Phe Gly Gly
100 105 110

Val Gly Lys Gln Val Gly Leu Ala Met Gly Ala Leu Leu His Pro Glu 115 120 125

Ala Gln Leu Gly Val Pro Leu Ile Ser Glu Pro Thr Gln Gly Ser Ile 130 135 140

Pro Met Asp Arg Pro Leu Ala Trp Pro Ser Pro Thr Thr Pro 145 150 155

<210> 689

<211> 47

<212> PRT

<213> Homo sapiens

<400> 689

Met Phe Tyr Pro Pro Cys Pro Phe Phe Pro Gln Leu Cys Phe Cys Ile
1 5 10 15

Phe Phe Leu Gly Lys Cys Lys Leu Ser Leu Ser Phe Met Thr Cys Glu 20 25 30

Ile Ser Val Ser Leu Glu Phe Val Arg Arg Arg Gly Asn His Ala 35 40 45

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<210> 690
<211> 100
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (36)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (47)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (51)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (83)
<223> Xaa equals any amino acid
<400> 690
Met Gly Met Ile Leu Val Leu Ala Ser Phe Leu Ala His Pro Val Glu
Ala Leu Ala Gln Ala Val Ala Leu Gly Gln Gln Gln Leu Ala Leu Leu
Gly Val Gln Xaa His Ala Val Glu Gly Phe Leu Gln Leu Gln Xaa Cys
                             .40
Phe Ala Xaa Leu Phe Val Phe Glu Gly Ala Leu Leu Ala His Leu Gly
His Phe Phe Val Glu Pro Gly Ala Ala Gln Gly Gln Leu Leu Asp Leu
                                         75
Gly Leu Xaa Arg Arg Glu Leu Gly Phe Gln Phe Ala Leu Leu Ala Arg
Phe Val Leu Gln
            100
<210> 691
<211> 343
<212> PRT
<213> Homo sapiens
<400> 691
Met Arg Ala Pro Phe Asn Thr Leu Phe Gly Arg Leu Phe Gly Leu Leu
Leu Val Ala Ile Val Leu Ala His Val Leu Ala Phe Phe Trp Phe His
```

His Tyr Gly Pro Pro Pro Pro Pro Arg Ala Ala Phe Val Glu Gln Pro Asp Gly Ser Leu Thr Pro Leu Arg Lys Ala Pro Arg Pro Trp Phe Gly Gly Pro Val Val Pro Leu Thr Phe Gln Phe Ile Ser Leu Ile Ile Ala Ala Trp Tyr Gly Ala Lys Leu Leu Ser Arg Pro Ile Gln Arg Leu Ser Ala Ala Glu Arg Leu Ser Val Asp Leu Asp Ser Pro Pro Leu Val 105 Glu Thr Gly Pro Arg Glu Ala Arg Gln Ala Ala Ser Thr Phe Asn Leu Met Gln Lys Arg Ile Arg Glu Gln Val Ser Gln Arg Ala Arg Met Leu 135 Gly Ala Val Ser His Asp Leu Arg Thr Pro Leu Ser Arg Leu Lys Leu Arg Leu Glu Gln Ile Glu Asp Pro Lys Leu Gln Gly Gln Met Arg Gln 170 Asp Leu Asp Asp Met Ile Gly Met Leu Asp Ala Thr Leu Ser Tyr Leu 185 His Glu Gln Arg Thr Ser Glu Thr Arg His Trp Leu Asp Val Gln Ala 200 Leu Val Glu Ser Leu Ser Glu Asn Ala Gln Asp Gln Gly Arg Asp Val 215 Gln Phe Ala Gly Thr Cys Thr Pro Leu Gln Val Gln Pro Met Ala Leu Arg Ser Cys Leu Asn Asn Leu Ile Asp Asn Ala Leu Arg Tyr Ala Gly 250 Thr Ala Arg Val Glu Leu Ala Asp Ser Arg Gly Ala Leu Val Ile Arg Val Ile Asp His Gly Pro Gly Ile Ala Ala Asp Lys Arg Glu Ala Val 275 280 Phe Glu Pro Phe Phe Arg Leu Glu Gly Ser Arg Asn Arg Asn Ser Gly

Gly Val Gly Leu Gly Met Thr Ile Ala Arg Glu Ala Val Glu Arg Leu 305 310 315 Gly Gly His Leu Ser Leu Glu Asp Thr Pro Gly Gly Leu Thr Ala 330

Val Met Trp Leu Pro Arg Val 340

325

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<210> 692
<211> 40
<212> PRT
<213> Homo sapiens
<400> 692
Met Ile Ile Leu His Ile Val Val Cys Leu Phe Thr Ile Ser Ile Ile
Glu Glu Gln Lys Glu Glu Ile Leu Cys Ser Thr Lys Ser Gln Ala Glu
Lys Thr Val Thr His Ile Glu Gln
        35
<210> 693
<211> 65
<212> PRT
<213> Homo sapiens
<400> 693
Met Leu Ser Pro Lys Ser Pro Arg Met Leu Pro Cys Leu Leu Gln
                  5
                                     10
Pro Leu Val Val Ala Asn Ile Pro Arg Val Pro Trp Leu Ala Asp Glu
Ser Leu Asn Pro Thr Pro Ile Ile Thr Trp Gln Ser Pro Cys Val Ala
                             40
Gln Leu Cys Pro Asn Phe Pro Phe Pro Thr Arg Thr Leu Val Thr Gly
Leu
 65
<210> 694
<211> 274
<212> PRT
<213> Homo sapiens
<400> 694
Met Phe Tyr Ile Ile Gly Gly Val Ala Thr Leu Leu Leu Ile Leu Val
                  5
                                     10
Ile Ile Val Phe Lys Glu Lys Pro Lys Tyr Pro Pro Ser Arg Aļa Gln
Ser Leu Ser Tyr Ala Leu Thr Ser Pro Asp Ala Ser Tyr Leu Gly Ser
Ile Ala Arg Leu Phe Lys Asn Leu Asn Phe Val Leu Leu Val Ile Thr
                         55
Tyr Gly Leu Asn Ala Gly Ala Phe Tyr Ala Leu Ser Thr Leu Leu Asn
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70 65 75 80 Arg Met Val Ile Trp His Tyr Pro Gly Glu Glu Val Asn Ala Gly Arg Ile Gly Leu Thr Ile Val Ile Ala Gly Met Leu Gly Ala Val Ile Ser 105 Gly Ile Trp Leu Asp Arg Ser Lys Thr Tyr Lys Glu Thr Thr Leu Val Val Tyr Ile Met Thr Leu Val Gly Met Val Val Tyr Thr Phe Thr Leu Asn Leu Gly His Leu Trp Val Val Phe Ile Thr Ala Gly Thr Met Gly 150 Phe Phe Met Thr Gly Tyr Leu Pro Leu Gly Phe Glu Phe Ala Val Glu 170 Leu Thr Tyr Pro Glu Ser Glu Gly Ile Ser Ser Gly Leu Leu Asn Ile Ser Ala Gln Val Phe Gly Ile Ile Phe Thr Ile Ser Gln Gly Gln Ile 195 200 Ile Asp Asn Tyr Gly Thr Lys Pro Gly Asn Ile Phe Leu Cys Val Phe Leu Thr Leu Gly Ala Ala Leu Thr Ala Phe Ile Lys Ala Asp Leu Arg 230 Arg Gln Lys Ala Asn Lys Glu Thr Leu Glu Asn Lys Leu Gln Glu Glu 250 Glu Glu Glu Ser Asn Thr Ser Lys Val Pro Thr Ala Val Ser Glu Asp 265 260 His Leu

<210> 695
<211> 108
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (62)
<223> Xaa equals any amino acid

<220>
<221> SITE
<222> (63)
<221> SITE
<222> (63)
<221> SITE
<222> (63)
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<221> SITE
<221> SITE
<221> SITE
<222> (63)
<21> SITE
<225 (63)</pre>
<230> Xaa equals any amino acid
<400> 695
Met Gly Ala Ala Lys Val Trp Gly Glu Val Gly Arg Trp Leu Val Ile

10

Ala Leu Ile Gln Leu Ala Lys Ala Val Leu Arg Met Leu Leu Leu Leu 20 25 30

Trp Phe Lys Ala Gly Leu Gln Thr Ser Pro Pro Ile Val Pro Leu Asp
35 40 45

Arg Glu Thr Arg His Ser Pro Arg Met Val Thr Thr Ala Xaa Xaa Thr 50 55 60

Met Ser Ser Pro Thr Trp Gly Ser Gly Gln Thr Gly Trp Cys Glu Pro 65 70 75 80

Ser Arg Thr Arg Arg Pro Cys Thr Pro Gly Thr Gly Glu Leu Pro Ser 85 90 95

Ser Gly Arg Asp Gly Ser Ser Ser Ile Thr Arg Ser 100 105

<210> 696

<211> 413

<212> PRT

<213> Homo sapiens

<400> 696

Met Arg Gly Cys Ala Val Leu Gly Ala Leu Gly Leu Leu Ala Gly
1 5 10 15

Ala Gly Val Gly Ser Trp Leu Leu Val Leu Tyr Leu Cys Pro Ala Ala 20 25 30

Ser Gln Pro Ile Ser Gly Thr Leu Gln Asp Glu Glu Ile Thr Leu Ser 35 40 45

Cys Ser Glu Ala Ser Ala Glu Glu Ala Leu Leu Pro Ala Leu Pro Lys 50 55 60

Thr Val Ser Phe Arg Ile Asn Ser Glu Asp Phe Leu Leu Glu Ala Gln 65 70 75 80

Val Arg Asp Gln Pro Arg Trp Leu Leu Val Cys His Glu Gly Trp Ser 85 90 95

Pro Ala Leu Gly Leu Gln Ile Cys Trp Ser Leu Gly His Leu Arg Leu
100 105 110

Thr His His Lys Gly Val Asn Leu Thr Asp Ile Lys Leu Asn Ser Ser 115 120 125

Gln Glu Phe Ala Gln Leu Ser Pro Arg Leu Gly Gly Phe Leu Glu Glu 130 135 140

Ala Trp Gln Pro Arg Asn Asn Cys Thr Ser Gly Gln Val Val Ser Leu 145 150 155 160

Arg Cys Ser Glu Cys Gly Ala Arg Pro Leu Ala Ser Arg Ile Val Gly
165 170 175

Gly Gln Ser Val Ala Pro Gly Arg Trp Pro Trp Gln Ala Ser Val Ala

180 185 190

Leu Gly Phe Arg His Thr Cys Gly Gly Ser Val Leu Ala Pro Arg Trp 195 200 205

Val Val Thr Ala Ala His Cys Met His Ser Phe Arg Leu Ala Arg Leu 210 215 . 220

Ser Ser Trp Arg Val His Ala Gly Leu Val Ser His Ser Ala Val Arg 225 230 235 240

Pro His Gln Gly Ala Leu Val Glu Arg Ile Ile Pro His Pro Leu Tyr 245 250 255

Ser Ala Gln Asn His Asp Tyr Asp Val Ala Leu Leu Arg Leu Gln Thr 260 265 270

Ala Leu Asn Phe Ser Asp Thr Val Gly Ala Val Cys Leu Pro Ala Lys 275 280 285

Glu Gln His Phe Pro Lys Gly Ser Arg Cys Trp Val Ser Gly Trp Gly 290 295 300

His Thr His Pro Ser His Thr Tyr Ser Ser Asp Met Leu Gln Asp Thr 305 310 315 320

Val Val Pro Leu Phe Ser Thr Gln Leu Cys Asn Ser Ser Cys Val Tyr 325 330 335

Ser Gly Ala Leu Thr Pro Arg Met Leu Cys Ala Gly Tyr Leu Asp Gly 340 345 350

Arg Ala Asp Ala Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Cys Pro 355 360 365

Asp Gly Asp Thr Trp Arg Leu Val Gly Val Val Ser Trp Gly Arg Gly 370 375 380

Cys Ala Glu Pro Asn His Pro Gly Val Tyr Ala Lys Val Ala Glu Phe 385 390 395 400

Leu Asp Trp Ile His Asp Thr Ala Gln Asp Ser Leu Leu
405
410

<210> 697

<211> 941

<212> PRT

<213> Homo sapiens

<400> 697

Met Val Phe Leu Pro Leu Lys Trp Ser Leu Ala Thr Met Ser Phe Leu

1 5 10 15

Leu Ser Ser Leu Leu Ala Leu Leu Thr Val Ser Thr Pro Ser Trp Cys
20 25 30

Gln Ser Thr Glu Ala Ser Pro Lys Arg Ser Asp Gly Thr Pro Phe Pro 35 40

Trp Asn Lys Ile Arg Leu Pro Glu Tyr Val Ile Pro Val His Tyr Asp Leu Leu Ile His Ala Asn Leu Thr Thr Leu Thr Phe Trp Gly Thr Thr Lys Val Glu Ile Thr Ala Ser Gln Pro Thr Ser Thr Ile Ile Leu His Ser His His Leu Gln Ile Ser Arg Ala Thr Leu Arg Lys Gly Ala Gly 105 Glu Arg Leu Ser Glu Glu Pro Leu Gln Val Leu Glu His Pro Pro Gln Glu Gln Ile Ala Leu Leu Ala Pro Glu Pro Leu Leu Val Gly Leu Pro 135 Tyr Thr Val Val Ile His Tyr Ala Gly Asn Leu Ser Glu Thr Phe His 150 Gly Phe Tyr Lys Ser Thr Tyr Arg Thr Lys Glu Gly Glu Leu Arg Ile Leu Ala Ser Thr Gln Phe Glu Pro Thr Ala Ala Arg Met Ala Phe Pro Cys Phe Asp Glu Pro Ala Phe Lys Ala Ser Phe Ser Ile Lys Ile Arg 195 200 205 Arg Glu Pro Arg His Leu Ala Ile Ser Asn Met Pro Leu Val Lys Ser Val Thr Val Ala Glu Gly Leu Ile Glu Asp His Phe Asp Val Thr Val 230 235 Lys Met Ser Thr Tyr Leu Val Ala Phe Ile Ile Ser Asp Phe Glu Ser Val Ser Lys Ile Thr Lys Ser Gly Val Lys Val Ser Val Tyr Ala Val 265 Pro Asp Lys Met Asn Gln Ala Asp Tyr Ala Leu Asp Ala Ala Val Thr Leu Leu Glu Phe Tyr Glu Asp Tyr Phe Ser Ile Pro Tyr Pro Leu Pro Lys Gln Asp Leu Ala Ala Ile Pro Asp Phe Gln Ser Gly Ala Met Glu 310 315 Asn Trp Gly Leu Thr Thr Tyr Arg Glu Ser Ala Leu Leu Phe Asp Ala 330 Glu Lys Ser Ser Ala Ser Ser Lys Leu Gly Ile Thr Met Thr Val Ala His Glu Leu Ala His Gln Trp Phe Gly Asn Leu Val Thr Met Glu Trp Trp Asn Asp Leu Trp Leu Asn Glu Gly Phe Ala Lys Phe Met Glu Phe

	370					375					380				
Val 385	Ser	Val	Ser	Val	Thr 390	His	Pro	Glu	Leu	Lys 395	Val	Gly	Asp	Tyr	Phe 400
Phe	Gly	Lys	Cys	Phe 405	Asp	Ala	Met	Glu	Val 410	Asp	Ala	Leu	Asn	Ser 415	Ser
His	Pro	Val	Ser 420	Thr	Pro	Val	Glu	Asn 425	Pro	Ala	Gln	Ile	Arg 430	Glu	Met
Phe	Asp	Asp 435	Val	Ser	Tyr	Asp	Lys 440	Gly	Ala	Cys	Ile	Leu 445	Asn	Met	Leu
Arg	Glu 450	Tyr	Leu	Ser	Ala	Asp 455	Ala	Phe	Lys	Ser	Gly 460	Ile	<b>V</b> al	Gln	Tyr
Leu 465	Gln	Lys	His	Ser	Tyr 470	Lys	Asn	Thr	Lys	Asn 475	Glu	Asp	Leu	Trp	Asp 480
Ser	Met	Ala	Ser	Ile 485	Cys	Pro	Thr	Asp	Gly 490	Val	Lys	Gly	Met	Asp 495	Gly
Phe	Суз	Ser	Arg 500	Ser	Gln	His	Ser	Ser 505	Ser	Ser	Ser	His	Trp 510	His	Gln
Glu	Gly	Val 515	Asp		Lys	Thr	Met 520	Met	Asn	Thr	Trp	Thr 525		Gln	Arg
Gly	Phe 530	Pro	Leu	Ile	Thr	Ile 535	Thr	Val	Arg	Gly	Arg 540	Asn	Val	His	Met
Lys 545	Gln	Glu	His	Tyr	Met 550	Lys	Gly	Ser	Asp	Gly 555	Ala	Pro	Asp	Thr	Gly 560
Tyr	Leu	Trp	His	Val 565	Pro	Leu	Thr	Phe	Ile 570	Thr	Ser	Lys	Ser	Asp 575	Met
Val	His	Arg	Phe 580	Leu	Leu	Lys	Thr	Lys 585	Thr	Asp	Val	Leu	Ile 590	·Leu	Pro
Glu	Glu	Val 595	Glu	Trp	Ile	Lys	Phe 600	Asn	Val	Gly	Met	Asn 605	Gly	Tyr	Tyr
Ile	Val 610	His	Tyr	Glu	Asp	Asp 615	Gly	Trp	Asp	Ser	Leu 620	Thr	Gly	Leu	Leu
Lys 625	Gly	Thr	His	Thr	Ala 630	Val	Ser	Ser	Asn	Asp 635	Arg	Ala	Ser	Leu	Il∈ 640
Asn	Asn	Ala	Phe	Gln 645	Leu	Val	Ser	Ile	Gly 650	Lys	Leu	Ser	Ile	Glu 655	Lys
Ala	Leu	Asp	Leu 660	Ser	Leu	Tyr	Leu	Lys 665	His	Glu	Thr	Glu	Ile 670	Met	Pro
Val	Phe	Gln 675	Gly	Leu	Asn	Glu	Leu 680	Ile	Pro	Met	Tyr	Lys 685	Leu	Met	Glu
Lys	Arg	Asp	Met	Asn	Glu	Val		Thr	Gln	Phe	Lys		Phe	Leu	Ile

Arg Leu Leu Arg Asp Leu Ile Asp Lys Gln Thr Trp Thr Asp Glu Gly Ser Val Ser Glu Arg Met Leu Arg Ser Glu Leu Leu Leu Ala Cys 730 Val His Asn Tyr Gln Pro Cys Val Gln Arg Ala Glu Gly Tyr Phe Arg 745 Lys Trp Lys Glu Ser Asn Gly Asn Leu Ser Leu Pro Val Asp Val Thr Leu Ala Val Phe Ala Val Gly Ala Gln Ser Thr Glu Gly Trp Asp Phe Leu Tyr Ser Lys Tyr Gln Phe Ser Leu Ser Ser Thr Glu Lys Ser Gln 790 Ile Glu Phe Ala Leu Cys Arg Thr Gln Asn Lys Glu Lys Leu Gln Trp 810 Leu Leu Asp Glu Ser Phe Lys Gly Asp Lys Ile Lys Thr Gln Glu Phe 825 Pro Gln Ile Leu Thr Leu Ile Gly Arg Asn Pro Val Gly Tyr Pro Leu Ala Trp Gln Phe Leu Arg Lys Asn Trp Asn Lys Leu Val Gln Lys Phe 855 Glu Leu Gly Ser Ser Ser Ile Ala His Met Val Met Gly Thr Thr Asn Gln Phe Ser Thr Arg Thr Arg Leu Glu Glu Val Lys Gly Phe Phe Ser 885 Ser Leu Lys Glu Asn Gly Ser Gln Leu Arg Cys Val Gln Gln Thr Ile 905 Glu Thr Ile Glu Glu Asn Ile Gly Trp Met Asp Lys Asn Phe Asp Lys 920 Ile Arg Val Trp Leu Gln Ser Glu Lys Leu Glu Arg Met 935

<210> 698
<211> 267
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (172)
<223> Xaa equals any amino acid

<220>
<221> SITE
<222> (175)

<223> Xaa equals any amino acid

<400> 698

Met Ser Glu Ile Arg Gly Lys Pro Ile Glu Ser Ser Cys Met Tyr Gly
1 5 10 15

Thr Cys Cys Leu Trp Gly Lys Thr Tyr Ser Ile Gly Phe Leu Arg Phe 20 25 30

Cys Lys Gln Ala Thr Leu Gln Phe Cys Val Val Lys Pro Leu Met Ala 35 40 45

Val Ser Thr Val Val Leu Gln Ala Phe Gly Lys Tyr Arg Asp Gly Asp 50 55 60

Phe Asp Val Thr Ser Gly Tyr Leu Tyr Val Thr Ile Ile Tyr Asn Ile 65 70 75 80

Ser Val Ser Leu Ala Leu Tyr Ala Leu Phe Leu Phe Tyr Phe Ala Thr 85 90 95

Arg Glu Leu Leu Ser Pro Tyr Ser Pro Val Leu Lys Phe Met Val 100 105 110

Lys Ser Val Ile Phe Leu Ser Phe Trp Gln Gly Met Leu Leu Ala Ile 115 120 125

Leu Glu Lys Cys Gly Ala Ile Pro Lys Ile His Ser Ala Arg Val Ser 130 135 140

Val Gly Glu Gly Thr Val Ala Ala Gly Tyr Gln Asp Phe Ile Ile Cys 145 150 155 160

Val Glu Met Phe Phe Ala Ala Leu Ala Leu Arg Xaa Ala Phe Xaa Tyr 165 170 175

Lys Val Tyr Ala Asp Lys Arg Leu Asp Ala Gln Gly Arg Cys Ala Pro 180 185 190

Met Lys Ser Ile Ser Ser Ser Leu Lys Glu Thr Met Asn Pro His Asp 195 200 205

Ile Val Gln Asp Ala Ile His Asn Phe Ser Pro Ala Tyr Gln Gln Tyr 210 215 220

Thr Gln Gln Ser Thr Leu Glu Pro Gly Pro Thr Trp Arg Gly Gly Ala 225 230 235 240

His Gly Leu Ser Arg Ser His Ser Leu Ser Gly Ala Arg Asp Asn Glu 245 250 255

Lys Thr Leu Leu Leu Ser Ser Asp Asp Glu Phe 260 265

<210> 699

<211> 53

<212> PRT

<213> Homo sapiens

<400> 699

Met Leu Val Leu Met Thr Thr Cys Ile Leu Ala Ala Val Cys Val His

1 5 10 15

Thr Ala Gln Cys Ala Pro Asp Ser Arg Met Asp Asn Asp Cys Pro Ser 20 25 30

His Gln Ala Gln Ile His Phe Arg Ala Ser Glu Val Arg Arg Gly Trp 35 40 45

Thr Phe Asn His Asp 50

<210> 700

<211> 578

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (326)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (342)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (444)

<223> Xaa equals any amino acid

<400> 700

Met Pro Phe Arg Leu Leu Ile Pro Leu Gly Leu Leu Cys Ala Leu Leu 1 5 10 15

Pro Gln His His Gly Ala Pro Gly Pro Asp Gly Ser Ala Pro Asp Pro 20 25 30

Ala His Tyr Arg Glu Arg Val Lys Ala Met Phe Tyr His Ala Tyr Asp 35 40 45

Ser Tyr Leu Glu Asn Ala Phe Pro Phe Asp Glu Leu Arg Pro Leu Thr 50 55 60

Cys Asp Gly His Asp Thr Trp Gly Ser Phe Ser Leu Thr Leu Ile Asp 65 70 75 80

Ala Leu Asp Thr Leu Leu Ile Leu Gly Asn Val Ser Glu Phe Gln Arg 85 90 95

Val Val Glu Val Leu Gln Asp Ser Val Asp Phe Asp Ile Asp Val Asn 100 105 110

Ala Ser Val Phe Glu Thr Asn Ile Arg Val Val Gly Gly Leu Leu Ser 115 120 125

Ala His Leu Leu Ser Lys Lys Ala Gly Val Glu Val Glu Ala Gly Trp

	130					135					140				
Pro 145	Cys	Ser	Gly	Pro	Leu 150	Leu	Arg	Met	Ala	Glu 155	Glu	Ala	Ala	Arg	Lys 160
Leu	Leu	Pro	Ala	Phe 165	Gln	Thr	Pro	Thr	Gly 170	Met	Pro	Tyr	Gly	Thr 175	Val
Asn	Leu	Leu	His 180	Gly	Val	Asn	Pro	Gly 185	Glu	Thr	Pro	Val	Thr 190	Cys	Thr
Ala	Gly	Ile 195	Gly	Thr	Phe	Ile	Val 200	Glu	Phe	Ala	Thr	Leu 205	Ser	Ser	Leu
Thr	Gly 210	Asp	Pro	Val	Phe	Glu 215	Asp	Val	Ala	Arg	Val 220	Ala	Leu	Met	Arg
Leu 225	Trp	Glu	Ser	Arg	Ser 230	Asp	Ile	Gly	Leu	Val 235	Gly	Asn	His	Ile	Asp 240
				245	Trp				250					255	
			260		Glu			265					270		
		275			Ala		280					285			
	290				Asp	295					300				
305					Pro 310					315					320
				325	Xaa				330					335	
			340		Xaa			345					350		
		355			Gly		360					365			
	370				Ile	375					380				
385					Leu 390					395					400
				405					410					415	
			420		Asp			425					430		
		435			Tyr		440					445			
Asn	Asn 450		Ser	Thr	Phe	Asp 455		Val	Ile	Thr	Pro 460	Туг	Gly	Glu	Cys

Ile Leu Gly Ala Gly Gly Tyr Ile Phe Asn Thr Glu Ala His Pro Ile 465 470 475 480

Asp Pro Ala Ala Leu His Cys Cys Gln Arg Leu Lys Glu Gln Trp 485 490 495

Glu Val Glu Asp Leu Met Arg Glu Phe Tyr Ser Leu Lys Arg Ser Arg 500 505 510

Ser Lys Phe Gln Lys Asn Thr Val Ser Ser Gly Pro Trp Glu Pro Pro 515 520 525

Ala Arg Pro Gly Thr Leu Phe Ser Pro Glu Asn His Asp Gln Ala Arg 530 535 540

Glu Arg Lys Pro Ala Lys Gln Lys Val Pro Leu Leu Ser Cys Pro Ser 545 550 555 560

Gln Pro Phe Thr Ser Lys Leu Ala Leu Leu Gly Gln Val Phe Leu Asp 565 570 575

Ser Ser

<210> 701

<211> 152

<212> PRT

<213> Homo sapiens

<400> 701

Met Gly Val His Val Gly Ala Ala Leu Gly Ala Leu Trp Phe Cys Leu
1 5 10 15

Thr Gly Ala Leu Glu Val Gln Val Pro Glu Asp Pro Val Val Ala Leu 20 25 30

Val Gly Thr Asp Ala Thr Leu Cys Cys Ser Phe Ser Pro Glu Pro Gly 35 40 45

Phe Ser Leu Ala Gln Leu Asn Leu Ile Trp Gln Leu Thr Asp Thr Lys 50 55 60

Gln Leu Val His Ser Phe Ala Glu Gly Gln Asp Gln Gly Ser Ala Tyr 65 70 75 80

Ala Asn Arg Thr Ala Leu Phe Leu Asp Leu Leu Ala Gln Gly Asn Ala 85 90 95

Ser Leu Arg Leu Gln Ser Val Arg Val Ala Asp Glu Gly Gln Leu His 100 105 110

Leu Leu Arg Glu His Pro Gly Phe Arg Gln Arg Cys Arg Gln Pro Ala 115 120 125

Gly Gly Arg Ser Leu Leu Glu Ala Gln His Asp Pro Gly Ala Gln Gln 130 135 140

Gly Pro Ala Ala Arg Gly Thr Trp

145 150

<210> 702

<211> 196

<212> PRT

<213> Homo sapiens

<400> 702

Met Ala Phe Arg Tyr Leu Ser Trp Ile Leu Phe Pro Leu Leu Gly Cys
1 5 10 15

Tyr Ala Val Tyr Ser Leu Leu Tyr Leu Glu His Lys Gly Trp Tyr Ser 20 25 30

Trp Val Leu Ser Met Leu Tyr Gly Phe Leu Leu Thr Phe Gly Phe Ile 35 40 45

Thr Met Thr Pro Gln Leu Phe Ile Asn Tyr Lys Leu Lys Ser Val Ala 50 55 60

His Leu Pro Trp Arg Met Leu Thr Tyr Lys Ala Leu Asn Thr Phe Ile 65 70 75 80

Asp Asp Leu Phe Ala Phe Val Ile Lys Met Pro Val Met Tyr Arg Ile 85 90 95

Gly Cys Leu Arg Asp Asp Val Val Phe Phe Ile Tyr Leu Tyr Gln Arg
100 105 110

Trp Ile Tyr Arg Val Asp Pro Thr Arg Val Asn Glu Phe Gly Met Ser 115 120 125

Gly Glu Asp Pro Thr Ala Ala Ala Pro Val Ala Glu Val Pro Thr Ala 130 135 140

Ala Gly Ala Leu Thr Pro Thr Pro Ala Pro Thr Thr Thr Thr Ala Thr 145 150 155 160

Arg Glu Glu Ala Ser Thr Ser Leu Pro Thr Lys Pro Thr Gln Gly Ala 165 170 175

Ser Ser Ala Ser Glu Pro Gln Glu Ala Pro Pro Lys Pro Ala Glu Asp 180 185 190

Lys Lys Asp 195

<210> 703

<211> 52

<212> PRT

<213> Homo sapiens

<400> 703

Met His Cys His Ser Ala Leu Gly Pro Met Ser Thr Pro Val Leu Pro 1 5 10 15

Phe Ser Gly Ile Gly Leu Ala Phe Leu Cys Leu Cys Leu Ala Ala Ser

20 25 30

Met Val Asp Leu Lys Cys Leu Gly Met Asn Ser Thr Leu Leu Gln Pro 35 40 45

Ser Ile Lys Glu 50

<210> 704

<211> 87

<212> PRT

<213> Homo sapiens

<400> 704

Met Gly Leu His Leu Arg Pro Tyr Arg Val Gly Leu Leu Pro Asp Gly
1 5 10 15

Leu Leu Phe Leu Leu Leu Leu Met Leu Leu Ala Asp Pro Ala Leu 20 25 30

Pro Ala Gly Arg His Pro Pro Val Val Leu Val Pro Gly Asp Leu Gly 35 40 45

Asn Gln Leu Glu Ala Lys Leu Asp Lys Pro Thr Val Val His Tyr Leu 50 55 60

Cys Ser Lys Lys Thr Glu Ser Tyr Phe Thr Ile Trp Leu Asn Leu Glu 65 70 75 80

Leu Leu Pro Val His His 85

<210> 705

<211> 40

<212> PRT

<213> Homo sapiens

<400> 705

Met Gly Pro Ser Gln Arg Glu Val Thr Val Gln Trp His Arg Ala Leu 1 5 10 15

Phe Leu Leu Pro Leu Leu Leu Ser Thr Arg Thr Glu Thr Lys Asn 20 25 30

Phe Gly Phe Lys Trp Leu Lys Asp 35 40

<210> 706

<211> 57

<212> PRT

<213> Homo sapiens

<400> 706

Met His Pro Trp Arg Leu Ser Met Cys Pro Ala Cys Val Leu Ala Ala 1 5 10 15

Leu Pro Ala Leu Cys Ser Cys Leu Cys Ser Pro Asp Ala Arg Pro Pro 20 25 30

His Gly Trp Met Ser Met Pro Phe Thr Pro His Pro Leu Val Ser Arg 35 40 45

Ala Met Pro Thr Cys His Pro Cys Ser 50 55

<210> 707

<211> 525

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (210)

<223> Xaa equals any amino acid

<400> 707

Met Leu Ala Phe Pro Leu Leu Thr Gly Leu Ile Ser Phe Arg Glu
1 5 10 15

Lys Arg Leu Gln Asp Val Gly Thr Pro Ala Ala Arg Ala Arg Ala Phe
20 25 30

Phe Thr Ala Pro Val Val Val Phe His Leu Asn Ile Leu Ser Tyr Phe 35 40 45

Ala Phe Leu Cys Leu Phe Ala Tyr Val Leu Met Val Asp Phe Gln Pro 50 60

Val Pro Ser Trp Cys Glu Cys Ala Ile Tyr Leu Trp Leu Phe Ser Leu 65 70 75 80

Val Cys Glu Glu Met Arg Gln Leu Phe Tyr Asp Pro Asp Glu Cys Gly
85 90 95

Leu Met Lys Lys Ala Ala Leu Tyr Phe Ser Asp Phe Trp Asn Lys Leu 100 105 110

Asp Val Gly Ala Ile Leu Leu Phe Val Ala Gly Leu Thr Cys Arg Leu 115 120 125

Ile Pro Ala Thr Leu Tyr Pro Gly Arg Val Ile Leu Ser Leu Asp Phe
130 135 140

Ile Leu Phe Cys Leu Arg Leu Met His Ile Phe Thr Ile Ser Lys Thr 145 150 155 160

Leu Gly Pro Lys Ile Ile Ile Val Lys Arg Met Met Lys Asp Val Phe 165 170 175

Phe Phe Leu Phe Leu Leu Ala Val Trp Val Val Ser Phe Gly Val Ala

Lys Gln Ala Ile Leu Ile His Asn Glu Arg Arg Val Asp Trp Leu Phe 195 200 205

Arg	Xaa 210	Ala	Val	Tyr	His	Ser 215	Tyr	Leu	Thr	Ile	Phe 220	Gly	Gln	Ile	Pro
Gly 225	Tyr	Ile	Asp	Gly	Val 230	Asn	Phe	Asn	Pro	Glu 235	His	Суѕ	Ser	Pro	Asn 240
Gly	Thr	Asp	Pro	Tyr 245	Lys	Pro	Lys	Cys	Pro 250	Glu	Ser	Asp	Ala	Thr 255	Gln
Gln	Arg	Pro	Ala 260	Phe	Pro	Glu	Trp	Leu 265	Thr	Val	Leu	Leu	Leu 270	Суѕ	Leu
Tyr	Leu	Leu 275	Phe	Thr	Asn	Ile	Leu 280	Leu	Leu	Asn	Leu	Leu 285	Ile	Ala	Met
Phe	Asn 290	Туr	Thr	Phe	Gln	Gln 295	Val	Gln	Glu	His	Thr 300	Asp	Gln	Ile	Trp
Lys 305	Phe	Gln	Arg	His	Asp 310	Leu	Ile	Glu	Glu	Tyr 315	His	Gly	Arg	Pro	Ala 320
Ala	Pro	Pro	Pro	Phe 325	Ile	Leu	Leu	Ser	His 330	Leu	Gln	Leu	Phe	Ile 335	Lys
Arg	Val	Val	Leu 340	Lys	Thr	Pro	Ala	Lys 345	Arg	His	Lys	Gln	Leu 350	Lys	Asn
Lys	Leu	Glu 355	Lys	Asn	Glu	Glu	Ala 360	Ala	Leu	Leu	Ser	Trp 365	Glu	Ile	Tyr
Leu	Lys 370	Glu	Asn	Tyr	Leu	Gln 375	Asn	Arg	Gln	Phe	Gln 380	Gln	Lys	Gln	Arg
Pro 385	Glu	Gln	Lys	Ile	Glu 390	Asp	Ile	Ser	Asn	Lys 395	Val	Asp	Ala	Met	Val 400
Asp	Leu	Leu	Asp	Leu 405	Asp	Pro	Leu	Lys	Arg 410	Ser	Gly	Ser	Met	Glu 415	Gln
Arg	Leu	Ala	Ser 420	Leu	Glu	Glu	Gln	Val 425	Ala	Gln	Thr	Ala	Arg 430	Ala	Leu
His	Trp	Ile 435	Val	Arg	Thr	Leu	Arg 440	Ala	Ser	Gly	Phe	Ser 445	Ser	Glu	Ala
Asp	Val 450	Pro	Thr	Leu	Ala	Ser 455	Gln	Lys	Ala	Ala	Glu 460	Glu	Pro	Asp	Ala
Glu 465	Pro	Gly	Gly	Arg	Lys 470	Lys	Thr	Glu	Glu	Pro 475	Gly	Asp	Ser	Tyr	His 480
Val	Asn	Ala	Arg	His 485	Leu	Leu	Tyr	Pro	Asn 490	Суѕ	Pro	Val	Thr	Arg 495	Phe
Pro	Val	Pro	Asn 500	Glu	Lys	Val	Pro	Trp 505	Glu	Thr	Glu	Phe	Leu 510	Ile	Tyr
Asp	Pro	Pro 515	Phe	Tyr	Thr	Ala	Glu 520	Arg	Lys	Asp	Ala	Ala 525			

<210> 708

<211> 937 <212> PRT

<213> Homo sapiens

<400> 708

Met Gln Asn Ser Gly Lys Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg 1 5 10 15

Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Ile Cys Leu
20 25 30

Gly Ile Ile Leu Ala Ile Gly Asn Ser Ile Trp Glu Ser Gln Thr Gly 35 40

Asp Gln Phe Arg Thr Phe Leu Phe Trp Asn Glu Gly Glu Lys Ser Ser 50 55 60

Val Phe Ser Gly Phe Leu Thr Phe Trp Ser Tyr Ile Ile Leu Asn 65 70 75 80

Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu 85 90 95

Gly His Ser Tyr Phe Ile Asn Trp Asp Arg Lys Met Tyr Tyr Ser Arg 100 105 110

Lys Ala Ile Pro Ala Val Ala Arg Thr Thr Leu Asn Glu Glu Leu 115 120 125

Gly Gln Ile Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln 130 135 140

Asn Ile Met Thr Phe Lys Arg Cys Ser Ile Asn Gly Arg Ile Tyr Gly 145 150 155 160

Glu Val His Asp Asp Leu Asp Gln Lys Thr Glu Ile Thr Gln Glu Lys 165 170 175

Glu Pro Val Asp Phe Ser Val Lys Ser Gln Ala Asp Arg Glu Phe Gln 180 185 190

Phe Phe Asp His Asn Leu Met Glu Ser Ile Lys Met Gly Asp Pro Lys 195 200 205

Val His Glu Phe Leu Arg Leu Leu Ala Leu Cys His Thr Val Met Ser 210 215 220

Glu Glu Asn Ser Ala Gly Glu Leu Ile Tyr Gln Val Gln Ser Pro Asp 225 230 235 240

Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Ile Phe Lys 245 250 255

Ser Arg Thr Pro Glu Thr Ile Thr Ile Glu Glu Leu Gly Thr Leu Val
260 265 270

Thr Tyr Gln Leu Leu Ala Phe Leu Asp Phe Asn Asn Thr Arg Lys Arg 275 280 285

Met	Ser 290	Val	Ile	<b>V</b> al	Arg	Asn 295	Pro	Glu	Gly	Gln	Ile 300	Lys	Leu	Tyr	Ser
Lys 305	Gly	Ala	Asp	Thr	Ile 310	Leu	Phe	Glu	Lys	Leu 315	His	Pro	Ser	Asn	Glu 320
Val	Leu	Leu	Ser	Leu 325	Thr	Ser	Asp	His	Leu 330	Ser	Glu	Phe	Ala	Gly 335	Glu
Gly	Leu	Arg	Thr 340	Leu	Ala	Ile	Ala	Tyr 345	Arg	Asp	Leu	Asp	Asp 350	Lys	Tyr
Phe	Lys	Glu 355	Trp	His	Lys	Met	Leu 360	Glu	Asp	Ala	Asn	Val 365	Ala	Thr	Glu
Glu	Arg 370	Asp	Glu	Arg	Ile	Ala 375	Gly	Leu	Tyr	Glu	Glu 380	Ile	Glu	Arg	Asp
Leu 385	Met	Leu	Leu	Gly	Ala 390	Thr	Ala	Val	Glu	Asp 395	Lys	Leu	Gln	Glu	Gly 400
Val	Ile	Glu	Thr	Val 405	Thr	Ser	Leu	Ser	Leu 410	Ala	Asn	Ile	Lys	Ile 415	Trp
Val	Leu	Thr	Gly 420	Asp	Lys	Gln	Glu	Thr 425	Ala	Ile	Asn	Ile	Gly 430	Tyr	Ala
Суѕ	Asn	Met 435	Leu	Thr	Asp	Asp	Met 440	Asn	Asp	Val	Phe	Val 445	Ile	Ala	Gly
Asn	Asn 450	Ala	Val	Glu	Val	Arg 455	Glu	Glu	Leu	Arg	Lys 460	Ala	Lys	Gln	Asn
Leu 465	Phe	Gly	Gln	Asn	Arg 470	Asn	Phe	Ser	Asn	Gly 475	His	Val	Val	Cys	Glu 480
Lys	Lys	Gln	Gln	Leu 485	Glu	Leu	Asp	Ser	Ile 490	Val	Glu	Glu	Thr	Ile 495	Thr
Gly	Asp	Tyr	Ala 500	Leu	Ile	Ile	Asn	Gly 505	His	Ser	Leu	Ala	His 510	Ala	Leu
Glu	Ser	Asp 515	Val	Lys	Asn	Asp	Leu 520	Leu	Glu	Leu	Ala	Cys 525	Met	Cys	Lys
Thr	Val 530	Ile	Суѕ	Cys	Arg	Val 535	Thr	Pro	Leu	Gln	Lys 540	Ala	Gln	Val	Val
Glu 545	Leu	Va1	Lys	Lys	Tyr 550	Arg	Asn	Ala	Val	Thr 555	Leu	Ala	Ile	Gly	Asp 560
Gly	Ala	Asn	Asp	Val 565	Ser	Met	Ile	Lys	Ser 570	Ala	His	Ile	Gly	Val 575	Gly
Ile	Ser	Gly	Gln 580	Glu	Gly	Leu	Gln	Ala 585	Val	Leu	Ala	Ser	Asp 590	Tyr	Ser
Phe	Ala	Gln 595	Phe	Arg	Tyr	Leu	Gln 600	Arg	Leu	Leu	Leu	Val 605	His	Gly	Arg

Trp Ser Tyr Phe Arg Met Cys Lys Phe Leu Cys Tyr Phe Phe Tyr Lys Asn Phe Ala Phe Thr Leu Val His Phe Trp Phe Gly Phe Phe Cys Gly Phe Ser Ala Gln Thr Val Tyr Asp Gln Trp Phe Ile Thr Leu Phe Asn Ile Val Tyr Thr Ser Leu Pro Val Leu Ala Met Gly Ile Phe Asp Gln Asp Val Ser Asp Gln Asn Ser Val Asp Cys Pro Gln Leu Tyr Lys Pro 680 Gly Gln Leu Asn Leu Leu Phe Asn Lys Arg Lys Phe Phe Ile Cys Val Met His Gly Ile Tyr Thr Ser Leu Val Leu Phe Phe Ile Pro Tyr Gly 710 715 Ala Phe Tyr Asn Val Ala Gly Glu Asp Gly Gln His Ile Ala Asp Tyr Gln Ser Phe Ala Val Thr Met Ala Thr Ser Leu Val Ile Val Val Ser Val Gln Ile Ala Leu Asp Thr Ser Tyr Trp Thr Phe Ile Asn His Val 760 Phe Ile Trp Gly Ser Ile Ala Ile Tyr Phe Ser Ile Leu Phe Thr Met His Ser Asn Gly Ile Phe Gly Ile Phe Pro Asn Gln Phe Pro Phe Val 795 Gly Asn Ala Arg His Ser Leu Thr Gln Lys Cys Ile Trp Leu Val Ile Leu Leu Thr Thr Val Ala Ser Val Met Pro Val Val Ala Phe Arg Phe 820 825 Leu Lys Val Asp Leu Tyr Pro Thr Leu Ser Asp Gln Ile Arg Arg Trp Gln Lys Ala Gln Lys Lys Ala Arg Pro Pro Ser Ser Arg Arg Pro Arg Thr Arg Arg Ser Ser Ser Arg Arg Ser Gly Tyr Ala Phe Ala His Gln Glu Gly Tyr Gly Glu Leu Ile Thr Ser Gly Lys Asn Met Arg Ala Lys 890 Asn Pro Pro Pro Thr Ser Gly Leu Glu Lys Thr His Tyr Asn Ser Thr Ser Trp Ile Glu Asn Leu Cys Lys Lys Thr Thr Asp Thr Val Ser Ser Phe Ser Gln Asp Lys Thr Val Lys Leu

930 935

<210> 709

<211> 151

<212> PRT

<213> Homo sapiens

<400> 709

Met Phe Leu Met Leu Gly Cys Ala Leu Pro Ile Tyr Asn Lys Tyr Trp

Pro Leu Phe Val Leu Phe Phe Tyr Ile Leu Ser Pro Ile Pro Tyr Cys 20 25 30

Ile Ala Arg Arg Leu Val Asp Asp Thr Asp Ala Met Ser Asn Ala Cys 35 40 45

Lys Glu Leu Ala Ile Phe Leu Thr Thr Gly Ile Val Val Ser Ala Phe 50 55 60

Gly Leu Pro Ile Val Phe Ala Arg Ala His Leu Met Gly Arg Leu Pro 65 70 75 80

Phe Phe Ser Lys Met Gly Thr Ala Glu Ser Glu Gly Arg Glu Thr Leu 85 90 95

Thr Gln Gln Leu Pro Leu Pro Ala Ala Ala Met Arg Arg Leu Leu Pro 100 105 110

Ala Ser Arg Val Ser Thr Gln Pro Val Leu Arg Leu Ala Asp Ser Ala 115 120 125

Glu Ser Leu Leu Gly Arg Pro Ala Leu Trp Ala Leu Gly Phe Leu Leu 130 135 140

Cys Pro Pro Ser Gln Ala Gln 145 150

<210> 710

<211> 242

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (88)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (139)

<223> Xaa equals any amino acid

<400> 710

Met Glu Gln Ala Arg Lys Ser Ser Thr Val Ser Leu Leu Ile Thr Val 1 5 10 15

Leu Phe Ala Val Ala Phe Ser Val Leu Leu Ser Cys Lys Asp His 20 25 30

Val Gly Tyr Ile Phe Thr Thr Asp Arg Asp Ile Ile Asn Leu Val Ala 35 40 45

Gln Val Val Pro Ile Tyr Ala Val Ser His Leu Phe Glu Ala Leu Ala 50 55 60

Cys Thr Ser Gly Gly Val Leu Arg Gly Ser Gly Asn Gln Lys Val Gly 65 70 75 80

Ala Ile Val Asn Thr Ile Gly Xaa Tyr Val Val Gly Leu Pro Ile Gly
85 90 95

Ile Ala Leu Met Phe Ala Thr Thr Leu Gly Val Met Gly Leu Trp Ser 100 105 110

Gly Ile Ile Cys Thr Val Phe Gln Ala Val Cys Phe Leu Gly Phe 115 120 125

Ile Ile Gln Leu Asn Trp Lys Lys Ala Cys Xaa Gln Ala Gln Val His 130 135 140

Ala Asn Leu Lys Val Asn Asn Val Pro Arg Ser Gly Asn Ser Ala Leu 145 150 155 160

Pro Gln Asp Pro Leu His Pro Gly Cys Pro Glu Asn Leu Glu Gly Ile 165 170 175

Leu Thr Asn Asp Val Gly Lys Thr Gly Glu Pro Gln Ser Asp Gln Gln
180 185 190

Met Arg Gln Glu Glu Pro Leu Pro Glu His Pro Gln Asp Gly Ala Lys
195 200 205

Leu Ser Arg Lys Gln Leu Val Leu Arg Arg Gly Leu Leu Leu Gly 210 215 220

Val Phe Leu Ile Leu Leu Val Gly Ile Leu Val Arg Phe Tyr Val Arg 225 230 235 240

Ile Gln

<210> 711

<211> 122

<212> PRT <213> Homo sapiens

<400> 711

Met Ile Gly Gly Ile Thr Cys Ile Leu Ser Leu Ile Cys Ala Leu Ala

Leu Ala Tyr Leu Asp Gln Arg Ala Glu Arg Ile Leu His Lys Glu Gln
20 25 30

Gly Lys Thr Gly Glu Val Ile Lys Leu Thr Asp Val Lys Asp Phe Ser

Leu Pro Leu Trp Leu Ile Phe Ile Ile Cys Val Cys Tyr Tyr Val Ala 50 55 60

Val Phe Pro Phe Ile Gly Leu Gly Lys Val Phe Phe Thr Glu Lys Phe 65 70 75 80

Gly Phe Ser Ser Gln Ala Ala Ser Ala Ile Asn Ser Val Val Tyr Val 85 90 95

Ile Ser Ala Pro Met Ser Pro Val Phe Gly Leu Leu Val Asp Lys Thr
100 105 110

Gly Lys Asn Ile Ile Trp Val Leu Cys Ala 115 120

<210> 712

<211> 46

<212> PRT

<213> Homo sapiens

<400> 712

Met Pro Trp Leu Lys Ser Leu Leu His Phe Ser Leu Phe Leu Val Val 1 5 10 15

Phe Ser Thr Leu Ala Val Lys Ser Leu Gly Val Pro Val Ala Ala Gly 20 25 30

Ser Pro Phe Cys Ile Val Asp Val Leu His Phe Ile Leu Leu 35 40 45

<210> 713

<211> 66

<212> PRT

<213> Homo sapiens

<400> 713

Met Ser Trp Val Ile Val Val Ile Ile Trp Gly Tyr Leu Leu Glu Gly
1 5 10 15

His Gly Val Pro Phe Cys Lys Ser Tyr Gly Pro Ser Pro Trp Lys Leu 20 25  $\cdot$  30

His Thr His His Ala Ala Tyr Asn Ser Gly Ser Ser Gln Val Tyr Arg 35 40 45

Ile Leu Glu Thr Leu Met Ser Gly Ser Thr His Cys Ser Phe Ser Gly 50 55 60

Thr Phe 65

<210> 714

<211> 90

<212> PRT

<213> Homo sapiens

<400> 714

Met Pro Arg Ala Pro Trp Arg Ile Pro Leu Cys Ala Leu Pro Thr Leu

1 5 10 15

Cys Leu Gly Ser Pro Leu Pro Ser Gln Pro Thr His Pro Ile Phe Tyr
20 25 30

Asp His Arg Ala Pro Thr Trp Lys Met Ala His Pro Gly Gly Pro Arg
35 40 45

Ser Ser His Ser Pro Arg Thr Trp Arg Thr Pro Ser Ser Gln Thr Lys 50 55 60

Ala Ala Leu Pro Ala Gly Gly Ala Arg Asn Ser Pro Leu Gln Leu Cys 65 70 75 80

Thr Arg Ser Arg Phe Cys Gly Thr Pro Met
85 90

<210> 715

<211> 710

<212> PRT

<213> Homo sapiens

<400> 715

Met Pro Val Pro Trp Phe Leu Leu Ser Leu Ala Leu Gly Arg Ser Pro 1 5 10 15

Val Val Leu Ser Leu Glu Arg Leu Val Gly Pro Gln Asp Ala Thr His
20 25 30

Cys Ser Pro Gly Leu Ser Cys Arg Leu Trp Asp Ser Asp Ile Leu Cys 35 40 45

Leu Pro Gly Asp Ile Val Pro Ala Pro Gly Pro Val Leu Ala Pro Thr
50 55 60

His Leu Gln Thr Glu Leu Val Leu Arg Cys Gln Lys Glu Thr Asp Cys 65 70 75 80

Asp Leu Cys Leu Arg Val Ala Val His Leu Ala Val His Gly His Trp
85 90 95

Glu Glu Pro Glu Asp Glu Glu Lys Phe Gly Gly Ala Ala Asp Leu Gly
100 105 110

Val Glu Glu Pro Arg Asn Ala Ser Leu Gln Ala Gln Val Val Leu Ser 115 120 125

Phe Gln Ala Tyr Pro Thr Ala Arg Cys Val Leu Leu Glu Val Gln Val
130 135 140

Pro Ala Ala Leu Val Gln Phe Gly Gln Ser Val Gly Ser Val Val Tyr 145 150 155 160

Asp Cys Phe Glu Ala Ala Leu Gly Ser Glu Val Arg Ile Trp Ser Tyr 165 170 175

Thr Gln Pro Arg Tyr Glu Lys Glu Leu Asn His Thr Gln Gln Leu Pro 185 Asp Cys Arg Gly Leu Glu Val Trp Asn Ser Ile Pro Ser Cys Trp Ala 200 Leu Pro Trp Leu Asn Val Ser Ala Asp Gly Asp Asn Val His Phe Gly 215 Leu Ser Leu Tyr Trp Asn Gln Val Gln Gly Pro Pro Lys Pro Arg Trp 230 His Lys Asn Leu Thr Gly Pro Gln Ile Ile Thr Leu Asn His Thr Asp 250 Leu Val Pro Cys Leu Cys Ile Gln Val Trp Pro Leu Glu Pro Asp Ser Val Arg Thr Asn Ile Cys Pro Phe Arg Glu Asp Pro Arg Ala His Gln 280 Asn Leu Trp Gln Ala Ala Arg Leu Arg Leu Leu Thr Leu Gln Ser Trp Leu Leu Asp Ala Pro Cys Ser Leu Pro Ala Glu Ala Ala Leu Cys Trp 315 Arg Ala Pro Gly Gly Asp Pro Cys Gln Pro Leu Val Pro Pro Leu Ser 330 Trp Glu Asn Val Thr Val Asp Lys Val Leu Glu Phe Pro Leu Leu Lys 345 Gly His Pro Asn Leu Cys Val Gln Val Asn Ser Ser Glu Lys Leu Gln 360 Leu Gln Glu Cys Leu Trp Ala Asp Ser Leu Gly Pro Leu Lys Asp Asp Val Leu Leu Glu Thr Arg Gly Pro Gln Asp Asn Arg Ser Leu Cys 390 395 . Ala Leu Glu Pro Ser Gly Cys Thr Ser Leu Pro Ser Lys Ala Ser Thr Arg Ala Ala Arg Leu Gly Glu Tyr Leu Leu Gln Asp Leu Gln Ser Gly Gln Cys Leu Gln Leu Trp Asp Asp Leu Gly Ala Leu Trp Ala Cys Pro Met Asp Lys Tyr Ile His Lys Arg Trp Ala Leu Val Trp Leu Ala 455 Cys Leu Leu Phe Ala Ala Ala Leu Ser Leu Ile Leu Leu Lys Lys 470 475 Asp His Ala Lys Gly Trp Leu Arg Leu Leu Lys Gln Asp Val Arg Ser 490

Gly Ala Ala Arg Gly Arg Ala Ala Leu Leu Leu Tyr Ser Ala Asp 500 505 510

Asp Ser Gly Phe Glu Arg Leu Val Gly Ala Leu Ala Ser Ala Leu Cys 515 520 525

Gln Leu Pro Leu Arg Val Ala Val Asp Leu Trp Ser Arg Arg Glu Leu 530 535 540

Ser Ala Gln Gly Pro Val Ala Trp Phe His Ala Gln Arg Arg Gln Thr 545 550 555 560

Leu Gln Glu Gly Gly Val Val Leu Leu Phe Ser Pro Gly Ala Val
565 570 575

Ala Leu Cys Ser Glu Trp Leu Gln Asp Gly Val Ser Gly Pro Gly Ala 580 585 590

His Gly Pro His Asp Ala Phe Arg Ala Ser Leu Ser Cys Val Leu Pro 595 600 605

Asp Phe Leu Gln Gly Arg Ala Pro Gly Ser Tyr Val Gly Ala Cys Phe 610 615 620

Asp Arg Leu Leu His Pro Asp Ala Val Pro Ala Leu Phe Arg Thr Val 625 630 635 640

Pro Val Phe Thr Leu Pro Ser Gln Leu Pro Asp Phe Leu Gly Ala Leu 645 650 655

Gln Gln Pro Arg Ala Pro Arg Ser Gly Arg Leu Gln Glu Arg Ala Glu 660 665 670

Gln Val Ser Arg Ala Leu Gln Pro Ala Leu Asp Ser Tyr Phe His Pro 675 680 685

Pro Gly Thr Pro Ala Pro Gly Arg Gly Val Gly Pro Gly Ala Gly Pro 690 695 700

Gly Ala Gly Asp Gly Thr

<210> 716

<211> 48

<212> PRT

<213> Homo sapiens

<400> 716

Met Phe Ala Pro Cys Phe Val Asn Leu Ala Leu Phe Tyr Leu Tyr Ile 1 5 10 15

Asn Ser Cys Asn Leu Leu Asn Leu Thr Ser Ile Asp Pro Phe Gln Gln 20 25 30

Lys Gly Lys Phe Lys Met Gln Thr Leu Leu Phe Ala Lys Glu Asp Ser

<210> 717 <211> 467 <212> PRT <213> Homo sapiens

<400> 717

Met Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Val

1 5 10 15

Glu Gly Gln Lys Ser Asn Arg Lys Asp Tyr Ser Leu Thr Met Gln Ser 20 25 30

Ser Val Thr Val Gln Glu Gly Met Cys Val His Val Arg Cys Ser Phe 35 40 45

Ser Tyr Pro Val Asp Ser Gln Thr Asp Ser Asp Pro Val His Gly Tyr
50 55 60

Trp Phe Arg Ala Gly Asn Asp Ile Ser Trp Lys Ala Pro Val Ala Thr 65 70 75 80

Asn Asn Pro Ala Trp Ala Val Gln Glu Glu Thr Arg Asp Arg Phe His 85 90 95

Leu Leu Gly Asp Pro Gln Thr Lys Asn Cys Thr Leu Ser Ile Arg Asp 100 105 110

Ala Arg Met Ser Asp Ala Gly Arg Tyr Phe Phe Arg Met Glu Lys Gly
115 120 125

Asn Ile Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr 130 135 140

Ala Leu Thr His Arg Pro Asn Ile Leu Ile Pro Gly Thr Leu Glu Ser 145 150 155 160

Gly Cys Phe Gln Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln 165 170 175

Gly Thr Pro Pro Met Ile Ser Trp Met Gly Thr Ser Val Ser Pro Leu 180 185 190

His Pro Ser Thr Thr Arg Ser Ser Val Leu Thr Leu Ile Pro Gln Pro 195 200 205

Gln His His Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala 210 215 220

Gly Val Thr Thr Asn Arg Thr Ile Gln Leu Asn Val Ser Tyr Pro Pro 225 230 235 240

Gln Asn Leu Thr Val Thr Val Phe Gln Gly Glu Gly Thr Ala Ser Thr 245 250 255

Ala Leu Gly Asn Ser Ser Ser Leu Ser Val Leu Glu Gly Gln Ser Leu 260 265 270

Arg Leu Val Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp

275 280 285

Thr Trp Arg Ser Leu Thr Leu Tyr Pro Ser Gln Pro Ser Asn Pro Leu 290 295 300

Val Leu Glu Leu Gln Val His Leu Gly Asp Glu Gly Glu Phe Thr Cys 305 310 315 320

Arg Ala Gln Asn Ser Leu Gly Ser Gln His Val Ser Leu Asn Leu Ser 325 330 335

Leu Gln Gln Glu Tyr Thr Gly Lys Met Arg Pro Val Ser Gly Val Leu 340 345 350

Leu Gly Ala Val Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Ser . 355 360 365

Phe Cys Val Ile Phe Ile Val Val Arg Ser Cys Arg Lys Lys Ser Ala 370 375 380

Arg Pro Ala Ala Asp Val Gly Asp Ile Gly Met Lys Asp Ala Asn Thr 385 390 395 400

Ile Arg Gly Ser Ala Ser Gln Gly Asn Leu Thr Glu Ser Trp Ala Asp 405 415

Asp Asn Pro Arg His His Gly Leu Ala Ala His Ser Ser Gly Glu Glu
420 425 430

Arg Glu Ile Gln Tyr Ala Pro Leu Ser Phe His Lys Gly Glu Pro Gln
435 440 445

Asp Leu Ser Gly Gln Glu Ala Thr Asn Asn Glu Tyr Ser Glu Ile Lys 450 455 460

Ile Pro Lys 465

<210> 718

<211> 455

<212> PRT

<213> Homo sapiens

<400> 718

Met Ala Ala Leu Leu Leu Leu Pro Leu Leu Leu Leu Leu Pro Leu Leu 1 5 10 15

Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Asp 20 25 30

Leu Ala Phe Ala Val Arg Ala Leu Cys Cys Lys Arg Ala Leu Arg Ala 35 40 45

Arg Ala Leu Ala Ala Ala Ala Asp Pro Glu Gly Pro Glu Gly Pro 50 55 60

Cys Ile Leu Ala Trp Arg Leu Ala Glu Leu Ala Gln Gln Arg Ala Arg
65 70 75 80

Asn Phe Leu Leu Arg Ser Arg Ala Leu Ala Thr Gln Arg Arg Ser Ala Arg Val Thr Gly Leu Thr Arg Leu Pro Thr Cys Ala Arg Leu Gly Leu 105 Gly Thr Arg Arg Arg Gln Arg Arg Gly Glu Arg Trp Arg Arg Arg Ala Gly Ser Ala Gly Ser Arg Arg Cys Ser Gly Arg Lys Arg Arg Gly 135 Val Cys Arg Arg Gly Arg Cys Arg Gln Arg Trp Arg Ser Arg Ala Pro 150 Leu Ser Pro Gly Ala Thr Val Ala Leu Leu Pro Ala Gly Pro Glu 170 Phe Leu Trp Leu Trp Ile Gly Leu Ala Lys Ala Gly Leu Arg Thr Ala Phe Val Pro Thr Ala Leu Arg Arg Gly Pro Leu Leu His Cys Leu Arg 200 Ser Cys Gly Ala Arg Ala Leu Val Leu Ala Pro Glu Phe Leu Glu Ser Leu Glu Pro Asp Leu Pro Ala Leu Arg Ala Met Gly Leu His Leu Trp Ala Ala Gly Pro Gly Thr His Pro Ala Gly Ile Ser Asp Leu Leu Ala Glu Val Ser Ala Glu Val Asp Gly Pro Val Pro Gly Tyr Leu Ser Ser 265 Pro Gln Ser Ile Thr Asp Thr Cys Leu Tyr Ile Phe Thr Ser Gly Thr 280 Thr Gly Leu Pro Lys Ala Ala Arg Ile Ser His Leu Lys Ile Leu Gln Cys Gln Gly Phe Tyr Gln Leu Cys Gly Val His Gln Glu Asp Val Ile 310 315 Tyr Leu Ala Leu Pro Leu Tyr His Met Ser Gly Ser Leu Leu Gly Ile Val Gly Cys Met Gly Ile Gly Ala Thr Val Val Leu Lys Ser Lys Phe 345 Ser Ala Gly Gln Phe Trp Glu Asp Cys Gln Gln His Arg Val Thr Val Phe Gln Tyr Ile Gly Glu Leu Cys Arg Tyr Leu Val Asn Gln Pro Pro 380 Ser Lys Ala Glu Arg Gly His Lys Val Arg Leu Ala Val Gly Ser Gly 390 Leu Arg Pro Asp Thr Trp Glu Arg Phe Val Arg Phe Gly Pro Leu

405 410 415

Gln Val Leu Glu Thr Tyr Gly Leu Thr Glu Gly Asn Val Pro Pro Ser 420 425 430

Thr Thr Gln Asp Ser Gly Ala Leu Trp Gly Val Leu Pro Gly Phe Thr
435 440 445

Ser Ile Ser Ser Pro Ser Pro 450 455

<210> 719

<211> 802

<212> PRT

<213> Homo sapiens

<400> 719

Met Leu Gly Ala Arg Ala Trp Leu Gly Arg Val Leu Leu Leu Pro Arg 1 5 10 15

Ala Gly Ala Gly Leu Ala Ala Ser Arg Arg Cys Pro Gly Val Trp Pro 20 25 30

Arg Thr Trp Pro His Arg Ser Pro Ser Arg Gly Ser Ser Ser Arg Asp 35 40 45

Lys Asp Arg Ser Ala Thr Val Ser Ser Ser Val Pro Met Pro Ala Gly 50 55 60

Gly Lys Gly Ser His Pro Ser Ser Thr Pro Gln Arg Val Pro Asn Arg 65 70 75 80

Leu Ile His Glu Lys Ser Pro Tyr Leu Leu Gln His Ala Tyr Asn Pro 85 90 95

Val Asp Trp Tyr Pro Trp Gly Gln Glu Ala Phe Asp Lys Ala Arg Lys 100 105 110

Glu Asn Lys Pro Ile Phe Leu Ser Val Gly Tyr Ser Thr Cys His Trp 115 120 125

Cys His Met Met Glu Glu Glu Ser Phe Gln Asn Glu Glu Ile Gly Arg 130 135 140

Leu Leu Ser Glu Asp Phe Val Ser Val Lys Val Asp Arg Glu Glu Arg 145 150 155 160

Pro Asp Val Asp Lys Val Tyr Met Thr Phe Val Gln Ala Thr Ser Ser 165 170 175

Gly Gly Gly Trp Pro Met Asn Val Trp Leu Thr Pro Asn Leu Gln Pro 180 185 190

Phe Val Gly Gly Thr Tyr Phe Pro Pro Glu Asp Gly Leu Thr Arg Val 195 200 205

Gly Phe Arg Thr Val Leu Leu Arg Ile Arg Glu Gln Trp Lys Gln Asn 210 215 220

Lys 225	Asn	Thr	Leu	Leu	230	Asn	ser	GIn	Arg	235	Thr	Thr	Ala	Leu	240
Ala	Arg	Ser	Glu	Ile 245	Ser	Val	Gly	Asp	Arg 250	Gln	Leu	Pro	Pro	Ser 255	Ala
Ala	Thr	Val	Asn 260	Asn	Arg	Cys	Phe	Gln 265	Gln	Leu	Asp	Glu	Gly 270	Tyr	Asp
Glu	Glu	Tyr 275	Gly	Gly	Phe	Ala	Glu 280	Ala	Pro	Lys	Phe	Pro 285	Thr	Pro	Val
Ile	Leu 290	Ser	Phe	Leu	Phe	Ser 295	Tyr	Trp	Leu	Ser	His 300	Arg	Leu	Thr	Gln
Asp 305	Gly	Ser	Arg	Ala	Gln 310	Gln	Met	Ala	Leu	His 315	Thr	Leu	Lys	Met	Met 320
Ala	Asn	Gly	Gly	11e 325	Arg	Asp	His	Val	Gly 330	Gln	Gly	Phe	His	Arg 335	Tyr
Ser	Thr	Asp	Arg 340	Gln	Trp	His	Val	Pro 345	His	Phe	Glu	Lys	Met 350	Leu	Tyr
Asp	Gln	Ala 355	Gln	Leu	Ala	Val	Ala 360	Tyr	Ser	Gln	Ala	Phe 365	Gln	Leu	Ser
Gly	Asp 370	Glu	Phe	Tyr	Ser	Asp 375	Val	Ala	Lys	Gly	11e 380	Leu	Gln	Tyr	Val
Ala 385	Arg	Ser	Leu	Ser	His 390	Arg	Ser	Gly	Gly	Phe 395	Tyr	Ser	Ala	Glu	Asp 400
Ala	Asp	Ser	Pro	Pro 405	Glu	Arg	Gly	Gln	Arg 410	Pro	Lys	Glu	Gly	Ala 415	Tyr
Tyr	Val	Trp	Thr 420	Val	Lys	Glu	Val	Gln 425	Gln	Leu	Leu	Pro	Glu 430	Pro	Val
Leu	Gly	Ala 435	Thr	Glu	Pro	Leu	Thr 440	Ser	Gly	Gln	Leu	Leu 445	Met	Lys	His
Tyr	Gly 450	Leu	Thr	Glu	Ala	Gly 455	Asn	Ile	Ser	Pro	Ser 460	Gln	Asp	Pro	Lys
Gly 465	Glu	Leu	Gln	Gly	Gln 470	Asn	Val	Leu	Thr	Val 475	Arg	Tyr	Ser	Leu	Glu 480
Leu	Thr	Ala	Ala	Arg 485	Phe	Gly	Leu	Asp	Val 490	Glu	Ala	Val	Arg	Thr 495	Leu
Leu	Asn	Ser	Gly 500	Leu	Glu	Lys	Leu	Phe 505	Gln	Ala	Arg	Lys	His 510	Arg	Pro
Lys	Pro	His 515	Leu	Asp	Ser	Lys	Met 520	Leu	Ala	Ala	Trp	Asn 525	Gly	Leu	Met
Val	Ser 530	Gly	Tyr	Ala	Val	Thr 535	Gly	Ala	Val	Leu	Gly 540	Gln	Asp	Arg	Leu
Ile	Asn	Tyr	Ala	Thr	Asn	Gly	Ala	Lys	Phe	Leu	Lys	Arg	His	Met	Phe

550 555 545 560 Asp Val Ala Ser Gly Arg Leu Met Arg Thr Cys Tyr Thr Gly Pro Gly 570 Gly Thr Val Glu His Ser Asn Pro Pro Cys Trp Gly Phe Leu Glu Asp 585 Tyr Ala Phe Val Val Arg Gly Leu Leu Asp Leu Tyr Glu Ala Ser Gln Glu Ser Ala Trp Leu Glu Trp Ala Leu Arg Leu Gln Asp Thr Gln Asp Arg Leu Phe Trp Asp Ser Gln Gly Gly Gly Tyr Phe Cys Ser Glu Ala Glu Leu Gly Ala Gly Leu Pro Leu Arg Leu Lys Asp Asp Gln Asp Gly 650 Ala Glu Pro Ser Ala Asn Ser Val Ser Ala His Asn Leu Leu Arg Leu His Gly Phe Thr Gly His Lys Asp Trp Met Asp Lys Cys Val Cys Leu Leu Thr Ala Phe Ser Glu Arg Met Arg Arg Val Pro Val Ala Leu Pro Glu Met Val Arg Ala Leu Ser Ala Gln Gln Gln Thr Leu Lys Gln Ile 705 710 Val Ile Cys Gly Asp Arg Gln Ala Lys Asp Thr Lys Ala Leu Val Gln 730 Cys Val His Ser Val Tyr Ile Pro Asn Lys Val Leu Ile Leu Ala Asp Gly Asp Pro Ser Ser Phe Leu Ser Arg Gln Leu Pro Phe Leu Ser Thr 760 Leu Arg Arg Leu Glu Asp Gln Ala Thr Ala Tyr Val Cys Glu Asn Gln Ala Cys Ser Val Pro Ile Thr Asp Pro Cys Glu Leu Arg Lys Leu Leu 795 790 His Pro

<210> 720

<211> 98

<212> PRT

<213> Homo sapiens

<400> 720

Met His Cys Cys Gln Leu Pro Trp Arg Cys Ala Gln Ala Pro Gln Glu
1 5 10 15

Ala Phe Leu Leu Cys Leu Leu Phe Leu Ile Leu Val Leu Val Leu Leu 20 25 30

Gly Cys Ser Arg Gly Leu Pro Gly His Thr Pro Trp Arg Leu His Pro 35 40 45

Ala Ala Ala Leu Leu Ala Pro Leu Leu His Asp Ala Leu Gly Ala 50 55 60

Cys Gly Phe Gln Gly Pro Glu Tyr Leu Leu Pro Cys Leu Leu Pro Leu 65 70 75 80

Pro Lys Pro Gly Gln Leu Gln Gly Pro Trp Gly Pro Leu Trp Ala Leu 85 90 95

Leu Pro

<210> 721

<211> 331

<212> PRT

<213> Homo sapiens

<400> 721

Met Leu Thr Gly Ile Ala Val Gly Ala Leu Leu Ala Leu Ala Leu Val 1 5 10 15

Gly Val Leu Ile Leu Phe Met Phe Arg Arg Leu Arg Gln Phe Arg Gln 20 25 30

Ala Gln Pro Thr Pro Gln Tyr Arg Phe Arg Lys Arg Asp Lys Val Met 35 40 45

Phe Tyr Gly Arg Lys Ile Met Arg Lys Val Thr Thr Leu Pro Asn Thr 50 55 60

Leu Val Glu Asn Thr Ala Leu Pro Arg Gln Arg Ala Arg Lys Arg Thr 65 70 75 80

Lys Val Leu Ser Leu Ala Lys Arg Ile Leu Arg Phe Lys Lys Glu Tyr 85 90 95

Pro Ala Leu Gln Pro Lys Glu Pro Pro Pro Ser Leu Leu Glu Ala Asp 100 105 110

Leu Thr Glu Phe Asp Val Lys Asn Ser His Leu Pro Ser Glu Val Leu 115 120 125

Tyr Met Leu Lys Asn Val Arg Val Leu Gly His Phe Glu Lys Pro Leu 130 135 140

Phe Leu Glu Leu Cys Lys His Ile Val Phe Val Gln Leu Gln Glu Gly 145 150 155 160

Glu His Val Phe Gln Pro Arg Glu Pro Asp Pro Ser Ile Cys Val Val

Gln Asp Gly Arg Leu Glu Val Cys Ile Gln Asp Thr Asp Gly Thr Glu

180 185 190

Val Val Lys Glu Val Leu Ala Gly Asp Ser Val His Ser Leu Leu 195 200 205

Ser Ile Leu Asp Ile Ile Thr Gly His Ala Ala Pro Tyr Lys Thr Val 210 215 220

Ser Val Arg Ala Ala Ile Pro Ser Ser Ile Leu Arg Leu Pro Ala Ala 225 230 235 240

Ala Phe His Gly Val Phe Glu Lys Tyr Pro Glu Thr Leu Val Arg Val
245 250 255

Val Gln Ile Ile Met Val Arg Leu Gln Arg Val Thr Phe Leu Ala Leu 260 265 270

His Asn Tyr Leu Gly Leu Thr Thr Glu Leu Phe Asn Ala Glu Ser Gln
275 280 285

Ala Ile Pro Leu Val Ser Val Ala Ser Val Ala Ala Gly Lys Ala Lys 290 295 300

Lys Gln Val Phe Tyr Gly Glu Glu Glu Arg Leu Lys Lys Pro Pro Arg 305 310 315 320

Leu Gln Glu Ser Cys Asp Ser Asp His Gly Gly 325 330

<210> 722

<211> 365

<212> PRT

<213> Homo sapiens

<400> 722

Met Phe Val Gly Leu Met Ala Phe Leu Leu Ser Phe Tyr Leu Ile Phe 1 5 10 15

Thr Asn Glu Gly Arg Ala Leu Lys Thr Ala Thr Ser Leu Ala Glu Gly
20 25 30

Leu Ser Leu Val Val Ser Pro Asp Ser Ile His Ser Val Ala Pro Glu 35 40 45

Asn Glu Gly Arg Leu Val His Ile Ile Gly Ala Leu Arg Thr Ser Lys 50 55 60

Leu Leu Ser Asp Pro Asn Tyr Gly Val His Leu Pro Ala Val Lys Leu 65 70 7.5 80

Arg Arg His Val Glu Met Tyr Gln Trp Val Glu Thr Glu Glu Ser Arg 85 90 95

Glu Tyr Thr Glu Asp Gly Gln Val Lys Lys Glu Thr Arg Tyr Ser Tyr 100 105 110

Asn Thr Glu Trp Arg Ser Glu Ile Ile Asn Ser Lys Asn Phe Asp Arg 115 120 125

Glu Ile Gly His Lys Asn Pro Ser Ala Met Ala Val Glu Ser Phe Met Ala Thr Ala Pro Phe Val Gln Ile Gly Arg Phe Phe Leu Ser Ser Gly 150 155 Leu Ile Asp Lys Val Asp Asn Phe Lys Ser Leu Ser Leu Ser Lys Leu 170 Glu Asp Pro His Val Asp Ile Ile Arg Arg Gly Asp Phe Phe Tyr His Ser Glu Asn Pro Lys Tyr Pro Glu Val Gly Asp Leu Arg Val Ser Phe Ser Tyr Ala Gly Leu Ser Gly Asp Asp Pro Asp Leu Gly Pro Ala His Val Val Thr Val Ile Ala Arg Gln Arg Gly Asp Gln Leu Val Pro Phe 230 Ser Thr Lys Ser Gly Asp Thr Leu Leu Leu His His Gly Asp Phe Ser Ala Glu Glu Val Phe His Arg Glu Leu Arg Ser Asn Ser Met Lys Thr Trp Gly Leu Arg Ala Ala Gly Trp Met Ala Met Phe Met Gly Leu 275 280 Asn Leu Met Thr Arg Ile Leu Tyr Thr Leu Val Asp Trp Phe Pro Val Phe Arg Asp Leu Val Asn Ile Gly Leu Lys Ala Phe Ala Phe Cys Val 310 Ala Thr Ser Leu Thr Leu Leu Thr Val Ala Ala Gly Trp Leu Phe Tyr Arg Pro Leu Trp Ala Leu Leu Ile Ala Gly Leu Ala Leu Val Pro Ile 345 340 Leu Val Ala Arg Thr Arg Val Pro Ala Lys Lys Leu Glu

<210> 723 <211> 219

<212> PRT

<213> Homo sapiens

<400> 723

Met Lys Leu Leu Trp Ala Cys Ile Val Cys Val Ala Phe Ala Arg
1 5 10 15

Lys Arg Arg Phe Pro Phe Ile Gly Glu Asp Asp Asn Asp Asp Gly His

Pro Leu His Pro Ser Leu Asn Ile Pro Tyr Gly Ile Arg Asn Leu Pro 35 40 45

Pro Pro Leu Tyr Tyr Arg Pro Val Asn Thr Val Pro Ser Tyr Pro Gly 50 55 60

Asn Thr Tyr Thr Asp Thr Gly Leu Pro Ser Tyr Pro Trp Ile Leu Thr 65 70 75 80

Ser Pro Gly Phe Pro Tyr Val Tyr His Ile Arg Gly Phe Pro Leu Ala 85 90 95

Thr Gln Leu Asn Val Pro Pro Leu Pro Pro Arg Gly Phe Pro Phe Val 100 105 110

Pro Pro Ser Arg Phe Phe Ser Ala Ala Ala Pro Ala Ala Pro Pro . 115 120 125

Ile Ala Ala Glu Pro Ala Ala Ala Pro Leu Thr Ala Thr Pro Val 130 135 140

Ala Ala Glu Pro Ala Ala Gly Ala Pro Val Ala Ala Glu Pro Ala Ala 145 150 155 160

Glu Ala Pro Val Gly Ala Glu Pro Ala Ala Glu Ala Pro Val Ala Ala 165 170 175

Glu Pro Ala Ala Glu Ala Pro Val Gly Val Glu Pro Ala Ala Glu Glu
180 185 190

Pro Ser Pro Ala Glu Pro Ala Thr Ala Lys Pro Ala Ala Pro Glu Pro 195 200 205

His Pro Ser Pro Ser Leu Glu Gln Ala Asn Gln 210 215

<210> 724

<211> 608

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (265)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (597)

<223> Xaa equals any amino acid

<400> 724

Met Val Gly Thr Lys Leu Arg Gln Thr Lys Asp Ala Leu Phe Thr Ile 1 5 10 15

Leu His Asp Leu Arg Pro Gln Asp Arg Phe Ser Ile Ile Gly Phe Ser 20 25 30

Asn Arg Ile Lys Val Trp Lys Asp His Leu Ile Ser Val Thr Pro Asp 35 40 45

Ser Ile Arg Asp Gly Lys Val Tyr Ile His His Met Ser Pro Thr Gly Gly Thr Asp Ile Asn Gly Val Leu Gln Arg Ala Ile Arg Leu Leu Asn Lys Tyr Val Ala His Ser Gly Ile Gly Asp Arg Ser Val Ser Leu Ile Val Phe Leu Thr Asp Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu 105 Lys Ile Leu Asn Asn Thr Arg Glu Ala Ala Arg Gly Gln Val Cys Ile Phe Thr Ile Gly Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu Lys 135 Leu Ser Leu Glu Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu Glu Asp Ala Gly Ser Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr Pro Leu Leu Ser Asp Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val Val Gln 185 Ala Thr Lys Thr Leu Phe Pro Asn Tyr Phe Asn Gly Ser Glu Ile Ile Ile Ala Gly Lys Leu Val Asp Arg Lys Leu Asp His Leu His Val Glu 215 220 Val Thr Ala Ser Asn Ser Lys Lys Phe Ile Ile Leu Lys Thr Asp Val Pro Val Arg Pro Gln Lys Ala Gly Lys Asp Val Thr Gly Ser Pro Arg 250 Pro Gly Gly Asp Gly Glu Gly Asp Xaa Asn His Ile Glu Arg Leu Trp Ser Tyr Leu Thr Thr Lys Glu Leu Leu Ser Ser Trp Leu Gln Ser Asp Asp Glu Pro Glu Lys Glu Arg Leu Arg Gln Arg Ala Gln Ala Leu Ala 295 Val Ser Tyr Arg Phe Leu Thr Pro Phe Thr Ser Met Lys Leu Arg Gly 305 310 Pro Val Pro Arg Met Asp Gly Leu Glu Glu Ala His Gly Met Ser Ala Ala Met Gly Pro Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly Thr 340 Gln Pro Gly Pro Leu Leu Lys Lys Pro Tyr Gln Pro Arg Ile Lys Ile Ser Lys Thr Ser Val Asp Gly Asp Pro His Phe Val Val Asp Phe Pro

380

Leu Ser Arg Leu Thr Val Cys Phe Asn Ile Asp Gly Gln Pro Gly Asp 385 390 395 400

375

Ile Leu Arg Leu Val Ser Asp His Arg Asp Ser Gly Val Thr Val Asn
405 410 415

Gly Glu Leu Ile Gly Ala Pro Ala Pro Pro Asn Gly His Lys Lys Gln
420 425 430

Arg Thr Tyr Leu Arg Thr Ile Thr Ile Leu Ile Asn Lys Pro Glu Arg
435
440
445

Ser Tyr Leu Glu Ile Thr Pro Ser Arg Val Ile Leu Asp Gly Gly Asp 450 455 460

Arg Leu Val Leu Pro Cys Asn Gln Ser Val Val Val Gly Ser Trp Gly 465 470 475 480

Leu Glu Val Ser Val Ser Ala Asn Ala Asn Val Thr Val Thr Ile Gln 485 490 495

Gly Ser Ile Ala Phe Val Ile Leu Ile His Leu Tyr Lys Lys Pro Ala 500 505 510

Pro Phe Gln Arg His His Leu Gly Phe Tyr Ile Ala Asn Ser Glu Gly 515 520 525

Leu Ser Ser Asn Cys His Gly Leu Leu Gly Gln Phe Leu Asn Gln Asp 530 535 540

Ala Arg Leu Thr Glu Asp Pro Ala Gly Pro Ser Gln Asn Leu Thr His 545 550 555 560

Pro Leu Leu Gln Val Gly Glu Gly Pro Glu Ala Val Leu Thr Val 565 570 575

Lys Gly His Gln Val Pro Val Val Trp Lys Gln Arg Lys Ile Tyr Asn 580 585 590

Gly Glu Glu Gln Xaa Asp Cys Trp Phe Ala Arg Asn Met Pro Pro Asn 595 600 605

<210> 725

370

<211> 56

<212> PRT

<213> Homo sapiens

<400> 725

Met Phe Tyr Lys Leu Thr Leu Ile Leu Cys Glu Leu Ser Val Ala Gly
1 5 10 15

Val Thr Gln Ala Ala Ser Gln Arg Pro Leu Gln Arg Leu Pro Arg His
20 25 30

Ile Cys Ser Gln Arg Ser Ser Ser Trp Glu Met Pro Pro Gln Gly Pro

```
Ala Pro Asp His Val Gly Arg Ala
     50
<210> 726
<211> 29
<212> PRT
<213> Homo sapiens
<400> 726
Met Tyr Val Trp Val Ser Gly Ala Leu Val Leu Val Leu Ser Pro His
Pro Ala Ser Arg Thr Leu Cys Leu Met Ala Gln Ala Val
<210> 727
<211> 49
<212> PRT
<213> Homo sapiens
<400> 727
Met Ser Arg Ala Pro Cys Ala Ser Ser Ile Leu Val Leu Thr Leu Ile
Val Thr Leu Leu Val Leu Leu Cys Ser Val Lys Ile Cys Asn Trp Leu
Arg Ile Thr Val Gly Val His Ser Tyr Ser Thr Lys Ser Pro Gln Val
                              40
Phe
<210> 728
<211> 540
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (137)
<223> Xaa equals any amino acid
Met Val Arg Thr Asp Gly His Thr Leu Ser Glu Lys Arg Asn Tyr Gln
Val Thr Asn Ser Met Phe Gly Ala Ser Arg Lys Lys Phe Val Glu Gly
Val Asp Ser Asp Tyr His Asp Glu Asn Met Tyr Tyr Ser Gln Ser Ser
         35
                              40
```

Met	Phe 50	Pro	His	Arg	Ser	G1u 55	Lys	Asp	Met	Leu	Ala 60	Ser	Pro	Ser	Thr
Ser 65	Gly	Gln	Leu	Ser	G1n 70	Phe	Gly	Ala	Ser	Leu 75	Tyr	Gly	Gln	Gln	Ser 80
Ala	Leu	Gly	Leu	Pro 85	Met	Arg	Gly	Met	Ser 90	Asn	Asn	Thr	Pro	Gln 95	Leu
Asn	Arg	Ser	Leu 100	Ser	Gln	Gly	Thr	Gln 105	Leu	Pro	Ser	His	Val 110	Thr	Pro
Thr	Thr	Gly 115	Val	Pro	Thr	Met	Ser 120	Leu	His	Thr	Pro	Pro 125	Ser	Pro	Ser
Arg	Gly 130	Ile	Leu	Pro	Met	Asn 135	Pro	Xaa	Asn	Met	Met 140	Asn	His	Ser	Gln
Val 145	Gly	Gln	Gly	Ile	Gly 150	Ile	Pro	Ser	Arg	Thr 155	Asn	Ser	Met	Ser	Ser 160
Ser	Gly	Leu	Gly	Ser 165	Pro	Asn	Arg	Ser	Ser 170	Pro	Ser	Ile	Ile	Cys 175	Met
Pro	Lys	Gln	Gln 180	Pro	Ser	Arg	Gln	Pro 185	Phe	Thr	Val	Asn	Ser 190	Met	Ser
Gly	Phe	Gly 195	Met	Asn	Arg	Asn	Gln 200	Ala	Phe	Gly	Met	Asn 205	Asn	Ser	Leu
Ser	Ser 210	Asn	Ile	Phe	Asn	Gly 215	Thr	Asp	Gly	Ser	Glu 220	Asn	Val	Thr	Gly
Leu 225	Asp	Leu	Ser	Asp	Phe 230	Pro	Ala	Leu	Ala	Asp 235	Arg	Asn	Arg	Arg	Glu 240
Gly	Ser	Gly	Asn	Pro 245	Thr	Pro	Leu	Ile	Asn 250	Pro	Leu	Ala	Gly	Arg 255	Ala
Pro	Tyr	Val	Gly 260	Met	Val	Thr	Lys	Pro 265	Ala	Asn	Glu	Gln	Ser 270	Gln	Asp
Phe	Ser	Ile 275	His	Asn	Glu	Asp	Phe 280	Pro	Ala	Leu	Pro	Gly 285	Ser	Ser	Tyr
Lys	Asp 290	Pro	Thr	Ser	Ser	Asn 295	Asp	Asp	Ser	Lys	Ser 300	Asn	Leu	Asn	Thr
Ser 305	Gly	Lys	Thr	Thr	Ser 310	Ser	Thr	Asp	Gly	Pro 315	Lys	Phe	Pro	Gly	Asp 320
Lys	Ser	Ser	Thr	Thr 325	Gln	Asn	Asn	Asn	Gln 330	Gln	Lys	Lys	Gly	11e 335	Gln
Val	Leu	Pro	Asp 340	Gly	Arg	Val	Thr	Asn 345	Ile	Pro	Gln	Gly	Met 350	Val	Thr
Asp	Gln	Phe 355	Gly	Met	Ile	Gly	Leu 360	Leu	Thr	Phe	Ile	Arg 365	Ala	Ala	Glu

Thr Asp Pro Gly Met Val His Leu Ala Leu Gly Ser Asp Leu Thr Thr 370 375 380

Leu Gly Leu Asn Leu Asn Ser Pro Glu Asn Leu Tyr Pro Lys Phe Ala 385 390 395 400

Ser Pro Trp Ala Ser Ser Pro Cys Arg Pro Gln Asp Ile Asp Phe His
405 410 415

Val Pro Ser Glu Tyr Leu Thr Asn Ile His Ile Arg Asp Lys Leu Ala
420 425 430

Ala Ile Lys Leu Gly Arg Tyr Gly Glu Asp Leu Leu Phe Tyr Leu Tyr 435 440 445

Tyr Met Asn Gly Gly Asp Val Leu Gln Leu Leu Ala Ala Val Glu Leu
450 455 460

Phe Asn Arg Asp Trp Arg Tyr His Lys Glu Glu Arg Val Trp Ile Thr 465 470 475 480

Arg Ala Pro Gly Met Glu Pro Thr Met Lys Thr Asn Thr Tyr Glu Arg
485 490 495

Gly Thr Tyr Tyr Phe Phe Asp Cys Leu Asn Trp Arg Lys Val Ala Lys 500 505 510

Glu Phe His Leu Glu Tyr Asp Lys Leu Glu Glu Arg Pro His Leu Pro 515 520 525

Ser Thr Phe Asn Tyr Asn Pro Ala Gln Gln Ala Phe 530 540

<210> 729

<211> 50

<212> PRT

<213> Homo sapiens

<400> 729

Met Tyr Ser Leu Val Leu Thr Phe Leu Val Ser Phe Cys Ala Leu Ser 1 5 10 15

Lys Thr Phe Leu Asp His Trp Phe Gln Met Phe Ile Tyr Tyr Ile Leu 20 25 30

Phe Lys Asp Ser Glu Ile Gly Phe Cys His Pro Leu Leu Tyr Val Leu 35 40

Phe His

<210> 730

<211> 42

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any amino acid

<400> 730

Met His Cys Phe Phe Leu Trp Leu Leu Phe Gly Leu Leu Gly Ile 1 5 10 15

Ser Gly Phe Leu Gly Tyr Ile Ser Val Ala Gly Xaa Ser Ile Tyr Val 20 25 30

Met Trp Lys Val Glu Lys Glu Met Asn Thr
35 40

<210> 731

<211> 99

<212> PRT

<213> Homo sapiens

<400> 731

Met Leu Phe Phe Leu Ser Leu Phe Leu Ser Leu Leu Leu Thr Leu Ser  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Leu Pro Ser Phe Leu Pro Phe Ser Phe Phe Phe Phe Ser Leu Phe Pro 20 25 30

His Leu Ser Ala Cys Leu Leu Pro Ser Leu Pro Ser Pro Pro Pro Pro 35 40 45

Leu Pro Pro Ser Leu Pro Ser Phe Leu Pro Ser Phe Leu Pro Ser Phe 50 55 60

Leu Pro Ser Leu Leu Ser Pro Ser Phe Pro Ala Phe Pro Ser Phe 65 70 75 80

Cys Gln Leu Ala Arg Arg Ser Pro Arg Lys Ser Thr Gln Met Leu Gln 85 90 95

Ser Thr Ser

<210> 732

<211> 66

<212> PRT

<213> Homo sapiens

<400> 732

Met Asn Tyr Ile Phe Leu Leu Met Ala Leu Pro His Leu Ile Ala Ile 1 5 10 15

Ala Leu Thr Trp Gly Arg Tyr Ser Phe Ser Cys Leu Ala Asn Lys Glu 20 25 30

Thr Glu Phe Gln Arg Cys Gln Val Thr Cys Leu Leu His Thr Leu Gly 35 40 45

Val Leu Met Phe Asn Phe Glu Leu Arg Ser Ile Trp Leu Glu Ser Ser

50 55 60

Leu His

<210> 733

<211> 34

<212> PRT

<213> Homo sapiens

<400> 733

Met Gln Met Phe Thr Val Ser Leu Leu Ser Leu Leu Leu Arg Ser 1 5 10 15

Thr Asp Gln Asn His Leu Gln Leu Leu Val Gly Arg Glu Asp His Tyr
20 25 30

Gly Gly

<210> 734

<211> 72

<212> PRT

<213> Homo sapiens

<400> 734

Met Arg His Thr Cys Ile Val Asn Ile Ala Ala Ser Leu Leu Val Ala 1 5 10 15

Asn Thr Trp Phe Ile Val Val Ala Ala Ile Gln Asp Asn Arg Tyr Ile
20 25 30

Leu Cys Lys Thr Ala Cys Val Ala Ala Thr Phe Phe Ile His Phe Phe 35 40 45

Tyr Leu Ser Val Phe Phe Trp Met Leu Thr Leu Gly Pro His Ala Val 50 55 60

Leu Ser Pro Gly Phe His Ser Ala

<210> 735

<211> 250

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (114)

<223> Xaa equals any amino acid

<400> 735

Met Phe Leu Ala Thr Leu Ser Phe Leu Leu Pro Phe Ala His Pro Phe 1 5 10 15

Gly Thr Val Ser Cys Glu Tyr Met Leu Gly Ser Pro Leu Ser Ser Leu 20 25 30

Ala Gln Val Asn Leu Ser Pro Phe Ser His Pro Lys Val His Met Asp 35 40 45

Pro Asn Tyr Cys His Pro Ser Thr Ser Leu His Leu Cys Ser Leu Ala 50 55 60

Trp Ser Phe Thr Arg Leu Leu His Pro Pro Leu Ser Pro Gly Ile Ser 65 70 75 80

Gln Val Val Lys Asp His Val Thr Lys Pro Thr Ala Met Ala Gln Gly 85 90 95

Arg Val Ala His Leu Ile Glu Trp Lys Gly Trp Ser Lys Pro Ser Asp 100 105 110

Ser Xaa Ala Ala Leu Glu Ser Ala Phe Ser Ser Tyr Ser Asp Leu Ser 115 120 125

Glu Gly Glu Gln Glu Ala Arg Phe Ala Ala Gly Val Ala Glu Gln Phe 130 135 140

Ala Ile Ala Glu Ala Lys Leu Arg Ala Trp Ser Ser Val Asp Gly Glu 145 150 155 160

Asp Ser Thr Asp Asp Ser Tyr Asp Glu Asp Phe Ala Gly Gly Met Asp 165 170 175

Thr Gly Glu Gly His Pro Gly Leu Gly Leu Trp Trp Thr His Leu Ile 180 185 190

Asp Leu Gly Ile Leu Ser Glu Pro His Pro Glu His Ser Gln Pro Leu 195 200 205

Gln Gly Glu Gly Glu Gly Gln Thr Gln Ser Arg Gln Ala Trp Thr Leu 210 215 220

Gln Gly Gln Glu Gly Cys Pro His Ser Trp Val Gly Asn Glu Gln Thr 225 230 235 240

Glu Met Asp Ser Phe Leu Ser His Arg Cys 245 250

<210> 736

<211> 41

<212> PRT

<213> Homo sapiens

<400> 736

Met Pro Pro Lys Gln Ile Pro Leu Thr Ser Leu Ser Leu Leu Ala Leu
1 5 10 15

Leu Leu Phe Phe Phe Phe Lys Ile Phe Cys Leu Leu Phe Leu Phe Tyr
20 25 30

Pro Leu Pro Asp Glu Ser Glu His Phe

<210> 737 <211> 53 <212> PRT <213> Homo sapiens <400> 737 Met Asn Leu Leu His Cys Leu Tyr Met Ile Asn Ile Ile Tyr Ile Phe Cys Ile Lys Leu Ile Trp Leu His Leu Ser Cys Ile Leu Ser His Ile Ser Phe Ile Ser Ser Met Asp Met Ser Arg Ser Leu Tyr Trp Ser Pro Val Cys Ala Val 50 <210> 738 <211> 139 <212> PRT <213> Homo sapiens Met Glu Ala Val Val Phe Val Phe Ser Leu Leu Asp Cys Cys Ala Leu 5 Ile Phe Leu Ser Val Tyr Phe Ile Ile Thr Leu Ser Asp Leu Glu Cys Asp Tyr Ile Asn Ala Arg Ser Cys Cys Ser Lys Leu Asn Lys Trp Val 40 Ile Pro Glu Leu Ile Gly His Thr Ile Val Thr Val Leu Leu Met 55 Ser Leu His Trp Phe Ile Phe Leu Leu Asn Leu Pro Val Ala Thr Trp Asn Ile Tyr Arg Tyr Ile Met Val Pro Ser Gly Asn Met Gly Val Phe

Asp Pro Thr Glu Ile His Asn Arg Gly Gln Leu Lys Ser His Met Lys
100 105 110

Glu Ala Met Ile Lys Leu Gly Phe His Leu Leu Cys Phe Phe Met Tyr 115 120 125

Leu Tyr Ser Met Ile Leu Ala Leu Ile Asn Asp 130 135

<210> 739 <211> 147 <212> PRT

<213> Homo sapiens

<400> 739

Met Leu Gly Leu Pro Trp Lys Gly Gly Leu Ser Trp Ala Leu Leu Leu 1 5 10 15

Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp His Phe His 20 25 30

Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg Tyr Leu Pro  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln Gln Ser Lys Asp 50 55 60

Tyr Tyr Ala Tyr Arg Leu Gly His Ile Leu Asn Ser Trp Lys Glu Gln 65 70 75 80

Val Glu Ser Lys Thr Val Phe Ser Met Glu Leu Leu Gly Arg Thr 85 90 95

Arg Cys Gly Lys Phe Glu Asp Asp Ile Asp Asn Cys His Phe Glu Glu 100 105 110

Ser Thr Glu Leu Asn Asn Thr Phe Thr Cys Phe Phe Thr Ile Ser Thr 115 120 125

Arg Pro Trp Met Thr Gln Phe Ser Leu Leu Asn Lys Thr Cys Leu Glu 130 135 140

Gly Phe His 145

<210> 740

<211> 159

<212> PRT

<213> Homo sapiens

<400> 740

Met Ala Gly Pro Gly Trp Thr Leu Leu Leu Leu Leu Leu Leu Leu Leu 1 5 10 15

Leu Leu Gly Ser Met Ala Gly Tyr Gly Pro Gln Lys Lys Leu Asn Leu 20 25 30

Ser His Lys Gly Ile Gly Glu Pro Cys Gly Arg His Glu Glu Cys Gln 35 40 45

Ser Asn Cys Cys Thr Ile Asn Ser Leu Ala Pro His Thr Leu Cys Thr 50 55 60

Pro Lys Thr Ile Phe Leu Gln Cys Leu Pro Trp Arg Lys Pro Asn Gly 65 70 75 . 80

Tyr Arg Cys Ser His Asp Ser Glu Cys Gln Ser Ser Cys Cys Val Arg 85 90 95

Asn Asn Ser Pro Gln Glu Leu Cys Thr Pro Gln Ser Val Phe Leu Gln 100 105 110

Cys Val Pro Trp Arg Lys Pro Asn Gly Asp Phe Cys Ser Ser His Gln
115 120 125

Glu Cys His Ser Gln Cys Cys Ile Gln Leu Arg Glu Tyr Ser Pro Phe 130 140

Arg Cys Ile Pro Arg Thr Gly Ile Leu Ala Gln Cys Leu Pro Leu 145 150 155

<210> 741

<211> 121

<212> PRT

<213> Homo sapiens

<400> 741

Met Met Leu Pro Gln Trp Leu Leu Leu Phe Leu Leu Phe Phe Phe 1 5 10 15

Leu Phe Leu Leu Thr Arg Gly Ser Leu Ser Pro Thr Lys Tyr Asn Leu 20 25 30

Leu Glu Leu Lys Glu Ser Cys Ile Arg Asn Gln Asp Cys Glu Thr Gly 35 40 45

Cys. Cys Gln Arg Ala Pro Asp Asn Cys Glu Ser His Cys Ala Glu Lys. 50 . 55

Gly Ser Glu Gly Ser Leu Cys Gln Thr Gln Val Phe Phe Gly Gln Tyr
65 70 75 80

Arg Ala Cys Pro Cys Leu Arg Asn Leu Thr Cys Ile Tyr Ser Lys Asn 85 90 95

Glu Lys Trp Leu Ser Ile Ala Tyr Gly Arg Cys Gln Lys Ile Gly Arg
100 105 110

Gln Lys Leu Ala Lys Lys Met Phe Phe

<210> 742

<211> 47

<212> PRT

<213> Homo sapiens

<400> 742

Met Leu Ile Ser Val Asp Ser Asn Val Pro Val Val Phe Leu Leu Leu 1 5 10 15

Phe Ile Leu Val Ile Leu Cys His Met Glu Cys Lys Gly His Ile Tyr
20 25 30

Ile Cys Val Cys Val Cys Val Tyr Met Tyr Ile Phe Lys Asn Ile 35 40 45

<210> 743

<211> 121

<212> PRT

<213> Homo sapiens

<400> 743

Met His Arg Ser Glu Pro Phe Leu Lys Met Ser Leu Leu Ile Leu Leu 1 5 10 15

Phe Leu Gly Leu Ala Glu Ala Cys Thr Pro Arg Glu Val Asn Leu Leu 20 25 30

Lys Gly Ile Ile Gly Leu Met Ser Arg Leu Ser Pro Asp Glu Ile Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Gly Leu Leu Ser Leu Gln Val Leu His Glu Glu Thr Ser Gly Cys Lys 50 55 60

Glu Glu Val Lys Pro Phe Ser Gly Thr Thr Pro Ser Arg Lys Pro Leu 65 70 75 80

Pro Lys Arg Lys Asn Thr Trp Asn Phe Leu Lys Cys Ala Tyr Met Val 85 90 95

Met Thr Tyr Leu Phe Val Ser Tyr Asn Lys Gly Asp Trp Phe Thr Phe 100 105 110

Ser Ser Gln Val Leu Leu Pro Leu Leu 115 120

<210> 744

<211> 44

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (41)

<223> Xaa equals any amino acid

<400> 744

Met Ile Leu Phe Asp Leu Thr Phe Phe Leu Phe Ala Pro Arg Ile Leu 1 5 10 15

Ala Ser Gly Ala Cys Ser Cys Ser Ile Tyr Pro Lys Ile Thr Leu Pro 20 25 30

Thr Lys Tyr Phe Ala Phe Ile Ile Xaa Thr Ser Phe 35

<210> 745

<211> 129

<212> PRT

<213> Homo sapiens

<400> 745

Met Ala Arg Gly Ser Leu Arg Arg Leu Leu Arg Leu Leu Val Leu Gly

10 15 Leu Trp Leu Ala Leu Leu Arg Ser Val Ala Gly Glu Gln Ala Pro Gly 25 Thr Ala Pro Cys Ser Arg Gly Ser Ser Trp Ser Ala Asp Leu Asp Lys Cys Met Asp Cys Ala Ser Cys Arg Ala Arg Pro His Ser Asp Phe Cys Leu Gly Cys Ala Ala Ala Pro Pro Ala Pro Phe Arg Leu Leu Trp Pro Ile Leu Gly Gly Ala Leu Ser Leu Thr Phe Val Leu Gly Leu Leu Ser Gly Phe Leu Val Trp Arg Arg Cys Arg Arg Arg Glu Lys Phe Thr Thr Pro Ile Glu Glu Thr Gly Gly Glu Gly Cys Pro Ala Val Ala Leu Ile Gln <210> 746 <211> 45 <212> PRT <213> Homo sapiens <400> 746 Met Val Ser Phe His Phe Gln Cys Thr Ser Tyr Phe Val Arg Leu Phe Phe Gln Leu Gln Leu Phe Val Gly Leu Val Ile Val Leu Ala Leu Leu 25 Ile Ser His Ser Leu Thr Tyr Ser Phe His Lys His Leu <210> 747 <211> 64 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (61) <223> Xaa equals any amino acid Met Ala Val Leu Leu Ile Thr Ile Leu Leu Phe Leu Cys Leu Gly Tyr Tyr Arg Val Ile Thr Glu Ile Ser Arg Lys Thr Pro Ala Cys Arg Met

25

Phe Thr Ser Ser Leu Ser Ser Trp Tyr Ile Met Arg Lys Leu Tyr Asp 35 40 45

Thr Pro Gly Glu Val Phe Leu Ser His Ala Ile Val Xaa Phe Leu Lys 50 55 60

<210> 748

<211> 116

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (46)

<223> Xaa equals any amino acid

<400> 748

Met Pro Gly Gly Thr Arg Cys Arg Val Leu Leu Leu Ser Leu Thr Phe 1 5 10 15

Gly Thr Ser Met Ala Cys Gly Asn Val Gly Leu Arg Leu Cys Pro Trp
20 25 30

Thr Trp His Asn Trp Leu Leu Pro Pro His Leu Cys Ser Xaa Trp Pro 35 40 45

Cys Arg Arg Cys Cys Trp Ala Ala Ala Thr Thr His Phe Ser Trp Pro 50 55 60

Pro Trp Val Arg Ser Ala Trp Gly Pro Pro Ala Ala Trp Leu Glu Ser 65 70 75 80

Ser Gly His Pro Leu Pro Ala Val Ala Ser Cys Ser Gln Pro Pro Ala . 85 90 95

Ser Ala Asp Ser Ser Arg Phe Ser Lys Val Pro Cys Cys Arg Arg Arg 100 105 110

Gly Trp Thr Arg 115

<210> 749

<211> 86

<212> PRT

<213> Homo sapiens

<400> 749

Met Pro Trp His Val Cys Phe Phe Leu Ser Gly Leu Leu Phe Pro Ser 1 5 10 15

Pro Gln Thr Ser Leu Gln His Leu Cys Leu Leu Thr Ser Leu Ile Leu 20 25 30

Gly Val Thr Ile Ser Ala Tyr Glu His Ala Ile Asn Leu Pro Ser Leu 35 40 45

Gln Asn Ser Leu Leu Thr Ser His Pro Ser Val Ala Ala Leu Ser Leu 50 55 60 .

Leu Ser Ser Ser Leu Gln Gln Asn Ser Leu Lys Glu Leu Leu Ala Gly 65 70 75 80

His Ser Gly Ser Leu Leu

<210> 750

<211> 60

<212> PRT

<213> Homo sapiens

<400> 750

Met Ala Ala Val Met Leu Val Leu Thr Val Val Leu Gly Leu Tyr Asn 1 5 10 15

Ser Tyr Asn Ser Cys Ala Glu Gln Ala Asp Gly Pro Leu Gly Arg Ser 20 25 30

Thr Cys Ser Ala Ala Pro Gly Thr Pro Gly Gly Ala Gln Asp Ser Ser 35 40 45

Met Ser Ser Leu Gln Ser Ser Arg Lys Pro His Thr 50 55 60

<210> 751

<211> 352

<212> PRT

<213> Homo sapiens

<400> 751

Met Leu Cys Arg Leu Cys Trp Leu Val Ser Tyr Ser Leu Ala Val Leu 1 5 10 15

Leu Leu Gly Cys Leu Leu Phe Leu Arg Lys Ala Ala Lys Pro Ala Glu 20 25 30

Thr Pro Arg Pro Thr Ser Leu Ser Gly Ala Pro Pro Thr Pro Arg His
35 40 45

Ser Arg Cys Pro Pro Asn His Thr Val Ser Ser Ala Ser Leu Ser Leu 50 55 60

Pro Ser Arg His Arg Leu Phe Leu Thr Tyr Arg His Cys Arg Asn Phe 65 70 75 80

Ser Ile Leu Leu Glu Pro Ser Gly Cys Ser Lys Asp Thr Phe Leu Leu 85 90 95

Leu Ala Ile Lys Ser Gln Pro Gly His Val Glu Arg Arg Ala Ala Ile 100 105 110

Arg Ser Thr Trp Gly Arg Trp Gly Asp Gly Leu Gly Pro Ala Leu Lys 115 120 125

Leu Val Phe Leu Leu Gly Val Ala Gly Ser Ala Pro Pro Ala Gln Leu 130 135 140

Leu Ala Tyr Glu Ser Arg Glu Phe Asp Asp Ile Leu Gln Trp Asp Phe 145 150 155 160

Thr Glu Asp Phe Phe Asn Leu Thr Leu Lys Glu Leu His Leu Gln Arg 165 170 175

Trp Val Val Ala Ala Cys Pro Gln Ala His Phe Met Leu Lys Gly Asp 180 185 190

Asp Asp Val Phe Val His Val Pro Asn Val Leu Glu Phe Leu Asp Gly
195 200 205

Trp Asp Pro Ala Gln Asp Leu Leu Val Gly Asp Val Ile Arg Gln Ala 210 215 220

Leu Pro Asn Arg Asn Thr Lys Val Lys Tyr Phe Ile Pro Pro Ser Met 225 230 235 240

Tyr Arg Ala Thr His Tyr Pro Pro Tyr Ala Gly Gly Gly Gly Tyr Val 245 250 255

Met Ser Arg Ala Thr Val Arg Arg Leu Gln Ala Ile Met Glu Asp Ala 260 265 270

Glu Leu Phe Pro Ile Asp Asp Val Phe Val Gly Met Cys Leu Arg Arg 275 280 285

Leu Gly Leu Ser Pro Met His His Ala Gly Phe Lys Thr Phe Gly Ile 290 295 300

Arg Arg Pro Leu Asp Pro Leu Asp Pro Cys Leu Tyr Arg Gly Leu Leu 305 310 315 320

Leu Val His Arg Leu Ser Pro Leu Glu Met Trp Thr Met Trp Ala Leu 325 330 335

Val Thr Asp Glu Gly Leu Lys Cys Ala Ala Gly Pro Ile Pro Gln Arg 340 345 350

<210> 752

<211> 10

<212> PRT

<213> Homo sapiens

<400> 752

Gly Leu Leu Tyr Ile Met Tyr Cys Asn Ile
1 5 10

<210> 753

<211> 45

<212> PRT

<213> Homo sapiens

<400> 753

Met Val Lys Trp Ile Ile Leu Ser Cys Leu Ile Leu Lys Gly Lys Arg

1 5 10 15

Thr Leu Asn Ser Ser Thr Phe Tyr Ala Ala Asn Lys Ser Ser Thr Ile
20 25 30

Asn Arg Asn Leu Ser Trp Gln Ala Leu Pro Phe Thr His
35 40 45

<210> 754

<211> 38

<212> PRT

<213> Homo sapiens

<400> 754

Met Leu Lys Leu Ala Thr Ile Leu Leu Thr Leu Leu Leu Lys Asn Leu 1 5 10 15

Asp Ala Gly Leu Thr Asp Lys Leu Ser Arg Ser Asn Phe Ile Thr Asp 20  $\phantom{-}25\phantom{+}\cdots\phantom{+}30\phantom{+}$ 

Phe Ile Leu Thr Lys Tyr 35

<210> 755

<211> 47

<212> PRT

<213> Homo sapiens

<400> 755

Met Ser Leu Leu Leu Pro Pro Leu Ala Leu Leu Leu Leu Leu Ala Ala 1 5 10 15

Leu Val Ala Pro Ala Thr Ala Ala Thr Ala Tyr Arg Pro Asp Trp Asn 20 25 30

Arg Leu Ser Gly Leu Thr Arg Ala Arg Val Glu Thr Cys Gly Gly
35 40 45

<210> 756

<211> 44

<212> PRT

<213> Homo sapiens

<400> 756

Met Pro Cys His Gly Leu Leu Ala Gln Gly Leu Ser Leu Ala Pro Leu 1 5 10 15

Pro Pro Trp Ala Leu Cys Cys Val Gly Val Ser Arg Ala Leu Gln Asp

20 25 30

Ile Gln Gln His Pro Arg Pro Pro Ala Pro Cys Gln 35 40

<210> 757

<211> 74

<212> PRT

<213> Homo sapiens

<400> 757

Met Val Leu Leu Leu Leu Leu Leu Gln Lys Ile Pro Gly Thr Pro 1 5 10 15

Leu Phe Gln Pro Gly Phe Leu Gly Trp Ala Gln Glu Ser Cys Gln Ile  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Gln Ser Tyr Val Gly Ser Lys Leu Pro Leu Cys Cys Phe Cys Gln Ala 35 40 45

Arg Cys Gly His Ser Lys Phe Ile Cys Val Asn Lys Arg Lys Glu Glu 50 55 60

Pro Ser Gly Cys Asn Arg Thr Asp Ser Ser 65 70

<210> 758

<211> 52

<212> PRT

<213> Homo sapiens

<400> 758

Met Ser Lys Ala Arg Phe Pro Phe Leu Ala Phe Pro Pro Leu Val Leu 1 5 10 15

Cys Leu Glu His Ser Gln Ala Ser Leu Gly Thr Arg Leu Pro Val Val 20 25 30

Thr Pro Ser Ser Leu Pro Ser Ser Cys Lys Gly Ile Gly Cys Gly Phe 35 40 45

Leu Glu Leu Gly 50

<210> 759

<211> 131

<212> PRT

<213> Homo sapiens

<400> 759

Met Leu Trp Thr Leu Thr Phe Phe Leu Leu Gln Arg Ser Leu Thr Ser

Pro Trp Leu Phe Gly Leu Leu Phe Leu Gly Ser Ser Asn Thr Ala Val $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Cys Cys Phe Leu Gly Gln Leu Ile Met Gly Pro Lys Gly Glu Arg Gly
35 40 45

Phe Pro Gly Pro Pro Gly Arg Cys Leu Cys Gly Pro Thr Met Asn Val 50 55 60

Asn Asn Pro Ser Tyr Gly Glu Ser Val Tyr Gly Pro Ser Ser Pro Arg
65 70 75 80

Val Pro Val Val Arg Leu Ser Gly Arg Ser Leu Gly Trp Leu Ser Val 85 90 95

Arg Thr Ser His Leu Ile Leu Met Gly Leu Cys Lys Ile Leu Ser Val 100 105 110

Lys Leu Thr Phe Phe His Asp Ser Glu Tyr Thr Leu Ile Ile Gly Asn 115 120 125

Trp Lys Ile 130

<210> 760

<211> 549

<212> PRT

<213> Homo sapiens

<400> 760

Met Gly Asn Ala Cys Ile Pro Leu Lys Arg Ile Ala Tyr Phe Leu Cys
1 10 15

Leu Leu Ser Ala Leu Leu Leu Thr Glu Gly Lys Lys Pro Ala Lys Pro 20 25 30

Lys Cys Pro Ala Val Cys Thr Cys Thr Lys Asp Asn Ala Leu Cys Glu 35 40 45

Asn Ala Arg Ser Ile Pro Arg Thr Val Pro Pro Asp Val Ile Ser Leu 50 55 60

Ser Phe Val Arg Ser Gly Phe Thr Glu Ile Ser Glu Gly Ser Phe Leu 65 70 75 80

Phe Thr Pro Ser Leu Gln Leu Leu Leu Phe Thr Ser Asn Ser Phe Asp 85 90 95

Val Ile Ser Asp Asp Ala Phe Ile Gly Leu Pro His Leu Glu Tyr Leu 100 105 110

Phe Ile Glu Asn Asn Asn Ile Lys Ser Ile Ser Arg His Thr Phe Arg 115 120 125

Gly Leu Lys Ser Leu Ile His Leu Ser Leu Ala Asn Asn Asn Leu Gln 130 135 140

Thr Leu Pro Lys Asp Ile Phe Lys Gly Leu Asp Ser Leu Thr Asn Val 145 150 155 160

Asp Leu Arg Gly Asn Ser Phe Asn Cys Asp Cys Lys Leu Lys Trp Leu

				165					170					175	
Val	Glu	Trp	Leu 180	Gly	His	Thr	Asn	Ala 185	Thr	Val	Glu	Asp	Ile 190	Tyr	Суѕ
Glu	Gly	Pro 195	Pro	Glu	Tyr	Lys	Lys 200	Arg	Lys	Ile	Asn	Ser 205	Leu	Ser	Ser
Lys	Asp 210	Phe	Asp	Cys	Ile	Ile 215	Thr	Glu	Phe	Ala	Lys 220	Ser	Gln	Asp	Leu
Pro 225	Tyr	Gln	Ser	Leu	Ser 230	Ile	Asp	Thr	Phe	Ser 235	Tyr	Leu	Asn	qzA	Glu 240
Tyr	Val	Val	Ile	Ala 245	Gln	Pro	Phe	Thr	Gly 250	Lys	Cys	Ile	Phe	Leu 255	Glu
Trp	Asp	His	Val 260	Glu	Lys	Thr	Phe	Arg 265	Asn	Tyr	Asp	Asn	Ile 270	Thr	Gly
Thr	Ser	Thr 275	Val	Val	Суз	Lys	Pro 280	Ile	Val	Ile	Glu	Thr 285	Gln	Leu	Туr
Val	Ile 290	Val	Ala	Gln	Leu	Phe 295	Gly	Gly	Ser	His	11e 300	Tyr	Lys	Arg	Asp
Ser 305		Ala	Asn	Lys	Phe 310	Ile	Lys	Ile	Gln	Asp 315	Ile	Glu	Ile	Leu	Lys 320
Ile	Arg	Lys	Pro	Asn 325	Asp	Ile	Glu	Thr	Phe 330	Lys	Ile	Glu	Asn	Asn 335	Trp
Tyr	Phe	Val	Val 340	Ala	Asp	Ser	Ser	Lys 345	Ala	Gly	Phe	Thr	Thr 350	Ile	Tyr
Lys	Trp	Asn 355	Gly	Asn	Gly	Phe	Tyr 360	Ser	His	Gln	Ser	Leu 365	His	Ala	Trp
Tyr	Arg 370	Asp	Thr	Asp	Val	Glu 375	Tyr	Leu	Glu	Ile	Val 380	Arg	Thr	Pro	Gln
Thr 385	Leu	Arg	Thr	Pro	His 390	Leu	Ile	Leu	Ser	Ser 395	Ser	Ser	Gln	Arg	Pro 400
Val	Ile	Tyr	Gln	Trp 405	Asn	Lys	Ala	Thr	Gln 410	Leu	Phe	Thr	Asn	Gln 415	Thr
Asp	Ile	Pro	Asn 420	Met	Glu	Asp	Val	Tyr 425	Ala	Val	Lys	His	Phe 430	Ser	Val
Lys	Gly	Asp 435	Val	Tyr	Ile	Cys	Leu 440	Thr	Arg	Phe	Ile	Gly 445	Asp	Ser	Lys
Val	Met 450	Lys	Trp	Gly	Gly	Ser 455	Ser	Phe	Gln	Asp	Ile 460	Gln	Arg	Met	Pro
Ser 465	Arg	Gly	Ser	Met	Val 470	Phe	Gln	Pro	Leu	Gln 475	Ile	Asn	Asn	Tyr	Glr 480
Tyr	Ala	Ile	Leu	Gly	Ser	Asp	Tyr	Ser	Phe	Thr	Gln	Val	Tyr	Asn	Trp

Asp Ala Glu Lys Ala Lys Phe Val Lys Phe Gln Glu Leu Asn Val Gln 500 505 510

Ala Pro Arg Ser Phe Thr His Val Ser Ile Asn Lys Arg Asn Phe Leu 515 520 525

Phe Ala Ser Ser Phe Lys Gly Asn Thr Gln Ile Tyr Lys His Val Ile 530 535 540

Val Asp Leu Ser Ala 545

<210> 761

<211> 54

<212> PRT

<213> Homo sapiens ·

<400> 761

Met Leu Gly Phe Leu Cys Leu Trp Tyr Gln Val Tyr Val Cys Met
1 5 10 15

Tyr Val Cys Thr Tyr Leu Phe Ile Tyr Leu Leu Phe Ser Leu Phe Ser 20 25 30

Leu Pro His Met Ile Cys Lys Lys Ser Val Lys Phe Ile Met Ser Ser 35 40 45

Pro Lys Pro Pro Ser Gly 50

<210> 762

<211> 34

<212> PRT

<213> Homo sapiens

<400> 762

Met Gln Ala Arg Trp Phe His Ile Leu Gly Met Met Met Phe Ile Trp
1 5 10 15

Ser Ser Ala His Gln Tyr Lys Cys Pro Cys Tyr Ser Arg Gln Ser Gln 20 25 30

Glu Lys

<210> 763

<211> 519

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (205)

<223> Xaa equals any amino acid

<220> <221> SITE <222> (207) <223> Xaa equals any amino acid <220> <221> SITE <222> (213) <223> Xaa equals any amino acid <220> <221> SITE <222> (225) <223> Xaa equals any amino acid <400> 763 Met Gln Gly Gly Gln Arg Pro His Leu Leu Leu Leu Leu Ala Val Cys Leu Gly Ala Gln Ser Arg Asn Gln Glu Glu Arg Leu Leu Ala Asp Leu Met Arg Asn Tyr Asp Pro His Leu Arg Pro Ala Glu Arg Asp Ser Asp Val Val Asn Val Ser Leu Lys Leu Thr Leu Thr Asn Leu Ile Ser 55 Leu Asn Glu Arg Glu Glu Ala Leu Thr Thr Asn Val Trp Ile Glu Met Gln Trp Cys Asp Tyr Arg Leu Arg Trp Asp Pro Lys Asp Tyr Glu Gly 90 Leu Trp Ile Leu Arg Val Pro Ser Thr Met Val Trp Arg Pro Asp Ile 105 Val Leu Glu Asn Asn Val Asp Gly Val Phe Glu Val Ala Leu Tyr Cys 120 Asn Val Leu Val Ser Pro Asp Gly Cys Ile Tyr Trp Leu Pro Pro Ala Ile Phe Arg Ser Ser Cys Ser Ile Ser Val Thr Tyr Phe Pro Phe Asp Trp Gln Asn Cys Ser Leu Ile Phe Gln Ser Gln Thr Tyr Ser Thr Ser 170 Glu Ile Asn Leu Gln Leu Ser Gln Glu Asp Gly Gln Ala Ile Glu Trp 180 185 Ile Phe Ile Asp Pro Glu Ala Phe Thr Glu Asn Gly Xaa Trp Xaa Ile Arg His Arg Pro Xaa Lys Met Leu Leu Asp Ser Val Ala Pro Ala Glu Xaa Ala Gly His Gln Lys Val Val Phe Tyr Leu Leu Ile Gln Arg Lys 235 225 230

Pro Leu Phe Tyr Val Ile Asn Ile Ile Ala Pro Cys Val Leu Ile Ser 245 250 255

Ser Val Ala Ile Leu Ile Tyr Phe Leu Pro Ala Lys Ala Gly Gln 260 265 270

Lys Cys Thr Val Ala Thr Asn Val Leu Leu Ala Gln Thr Val Phe Leu 275 280 285

Phe Leu Val Ala Lys Lys Val Pro Glu Thr Ser Gln Ala Val Pro Leu 290 295 300

Ile Ser Lys Tyr Leu Thr Phe Leu Met Val Val Thr Ile Leu Ile Val 305 310 315 320

Val Asn Ser Val Val Val Leu Asn Val Ser Leu Arg Ser Pro His Thr 325 330 335

His Ser Met Ala Arg Gly Val Arg Lys Val Phe Leu Arg Leu Pro 340 345 350

Gln Leu Leu Arg Met His Val Arg Pro Leu Ala Pro Ala Ala Val Gln . 355 360 365

Asp Ala Arg Phe Arg Leu Gln Asn Gly Ser Ser Ser Gly Trp Pro Ile 370 375 380

Met Ala Arg Glu Glu Gly Asp Leu Cys Leu Pro Arg Ser Glu Leu Leu 385 390 395 400

Phe Arg Gln Arg Gln Arg Asn Gly Leu Val Gln Ala Val Leu Glu Lys
405 410 415

Leu Glu Asn Gly Pro Glu Val Arg Gln Ser Gln Glu Phe Cys Gly Ser 420 425 430

Leu Lys Gln Ala Ser Pro Ala Ile Gln Ala Cys Val Asp Ala Cys Asn 435 440 445

Leu Met Ala Arg Ala Arg Gln Gln Ser His Phe Asp Ser Gly Asn 450 455 460

Glu Glu Trp Leu Leu Val Gly Arg Val Leu Asp Arg Val Cys Phe Leu 465 470 475 480

Ala Met Leu Ser Leu Phe Ile Cys Gly Thr Ala Gly Ile Phe Leu Met 485 490 495

Ala His Tyr Asn Gln Val Pro Asp Leu Pro Phe Pro Gly Asp Pro Arg
500 505 510

Pro Tyr Leu Pro Leu Pro Asp 515

<210> 764

<211> 68

<212> PRT

<213> Homo sapiens

<400> 764 Met Val His Asn Cys Leu Leu Leu Lys Phe Leu Leu Leu Phe Cys Phe Pro Leu Ile Ser Tyr Gln Leu Met Asn Gly Ser Leu Gln Ser Leu 25 Gln Arg Leu Arg Met Ile Gln Asn Val Gln Cys Ile Val Leu Asn Lys Gln Glu Ala Glu Phe Leu Met Gly Ile Ser Phe Gln Ile Tyr Asp Trp Ser Leu Gly Phe 65 <210> 765 <211> 56 <212> PRT <213> Homo sapiens <400> 765 Met Leu Ile Ala Lys Leu Pro Val Leu Glu Ser Ile Cys Phe Phe Met Leu Phe Leu Asn Pro Leu Val Ile Leu Leu Ser Leu Asn Asn Ala Leu 25 Pro Leu Val Phe His Pro His Ser Glu Phe Leu Glu Asp His Asn Arg Gly Asp Thr Leu Pro Ser Ile Val 50 <210> 766 <211> 79 <212> PRT <213> Homo sapiens <400> 766 Met Met Ser Ser Cys Leu Val Val Val Ile Thr Leu Arg Ala Tyr Phe Ser Trp Leu Gln Ala Ile Arg Ser Gln Val Val Trp Ser Arg Met Lys Arg Leu Gln Ser Ala Ser Arg Gln Ser Gly Leu Ser Ile Pro Arg Ser Glu Met Ser Ala Leu His Arg Leu Gln Asp Trp Ser Asp Lys Ser His

Ile Leu Phe Phe Ile Phe Leu Pro Arg Val Cys Arg Phe Pro Leu

70

<210> 767

<211> 162

<212> PRT

<213> Homo sapiens

<400> 767

Met Thr Ser Asn Phe Pro Phe Cys Thr Leu Ile Leu Gly Ile Ala Gln
1 5 10 15

Ala Gln Ala Cys Pro Gly Cys Pro Gly Asp Trp Pro Gly Leu Gly Ser

Gly Val Gly Glu Gly Leu His His Ile Arg Thr Cys Arg Thr Pro Ile 35 40 45

Pro Cys Ser Pro Pro Ala Pro Ala Ala Ala Cys Leu Gly Ser Gly His 50 55 60

Ala Arg Leu Pro Cys Val Leu Arg Leu Trp Pro Val Pro Ala Asn Leu 65 70 75 80

Ser Ser Pro Phe Arg Leu Glu Ala Leu His Cys Ser Phe Trp Ser Ser 85 90 95

Pro Leu Leu Pro Ala Pro His Leu Ala Phe Phe Gly Phe Arg Asp Leu 100 105 110

Leu Thr Asp Phe Leu Leu Ala Ala Cys Leu Leu Thr Phe Gln Lys Thr
115 120 125

Pro Leu Glu Leu Pro Met Ala Val Val His Leu Leu Val Ala Thr Pro 130 135 140

Cys Tyr Gln Met Leu Asp Asn Leu Pro Leu Pro Ser Ala Ala Ala Asn 145 150 155 160

Trp Cys

<210> 768

<211> 85

<212> PRT

<213> Homo sapiens

<400> 768

Met Gly Phe Trp Cys Gly Cys Pro Phe Cys Leu Leu Val Val Leu Leu 1 5 10 15

Thr Asp Arg Thr Leu Ser Cys Arg Ser Val Gly Val Pro Cys Asn Val 20 25 30

Arg Cys Gln Cys Ala Pro Ala Gly Gly Cys Leu Pro Val Arg Leu Leu 35 40

Ala Gly Gln Gly Ser Gly Thr His Leu Arg Arg Gln Ser Ala Arg Ser 50 60

Gln Ile Ser Ser Cys Met Leu Gly Glu Pro Leu Leu Ser Ser Lys Leu

65 70 75 80

Ser Asp Arg Asp Ile 85

<210> 769

<211> 162

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (66)

<223> Xaa equals any amino acid

<400> 769

Met Leu Ile Tyr Trp Leu Gln Ser Ser Phe Ile Leu Ser Ala Phe Val 1 5 10 15

Leu Ile Asn Ser Pro Val Thr Thr Gly Ile Gln Lys Ser Cys Cys Lys
20 25 30

Phe Phe Pro Val Ser Ile Asn Leu Cys Phe Ala Ser Leu His Arg Met 35 40 45

Lys Val Val Thr Leu Val Ala Leu Gln Trp Leu Asn Ile Ala Leu Arg 50 55 60

Ser Xaa Leu Glu Glu Val Gln Gln Ala Ala Asp Gly Met Thr Ile Lys 65 70 75 80

Gly Ser Lys Val Gln Val Ser Phe Cys Ala Pro Gly Ala Pro Gly Arg 85 90 95

Ser Thr Leu Ala Ala Leu Ile Ala Ala Gln Arg Val Met His Ser Asn 100 105 110

Gln Lys Gly Leu Leu Pro Glu Pro Asn Pro Val Gln Ile Met Lys Ser 115 120 125

Leu Asn Asn Pro Ala Met Leu Gln Val Leu Leu Gln Ala Pro Ser Tyr 130 135 140

Val Asp Glu Leu Leu Asn Gln Pro Phe Leu Glu His Leu Thr Ala Cys 145 150 155 160

His Ile

<210> 770

<211> 47

<212> PRT

<213> Homo sapiens

<400> 770

Met Leu Leu Phe Ser Ser Arg Phe Ile Met Phe Leu Trp Pro Pro Val 1 5 10 15

Ser Gly Val Cys Leu Ser Phe Ile Arg Asp Arg Ser Phe Leu Pro Met 20 25 30

Cys His Phe Ile Tyr Val Leu Ile Leu Cys Asn Ser Ile Ala Leu 35 40 45

<210> 771

<211> 79

<212> PRT

<213> Homo sapiens

<400> 771

Met Thr Leu Met Cys Leu Cys Leu Ser Val Thr Val Leu His Pro Leu 1 5 10 15

Arg Ser Lys Glu Arg Leu Ser Gly Thr Phe Cys Gly Tyr Ser Ser Ser 20 25 30

Trp Cys Ser Pro Ala Ser Glu Ser Ser Ser Pro Gly Ser Leu Leu Thr 35 40 45

Cys Ala Ala Ser Gly Ser His Pro Asp Cys Pro Leu Ser Gln Arg Leu 50 55 60

Leu Gly Val Gln Leu Ala Ala Leu Gly Arg Pro Gln Gly Leu Phe 65 70 75

<210> 772

<211> 49

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (27)

<223> Xaa equals any amino acid

<400> 772

Met Arg Pro Gly Ser Phe Ser Phe Ile Ala Phe Leu Ala Thr Glu Val 1 5 10 15

Ser Ser Cys Phe Pro Gly Arg Pro Asp Cys Xaa Thr Gly Met Trp Leu 20 25 30

Leu Gln Leu Gln Lys Lys Gln Arg Thr Leu Leu Ala Met Ala Pro Arg 35 40 45

Arg

<210> 773

<211> 292

<212> PRT

<213> Homo sapiens

<400> 773 Met Leu Arg Val Leu Cys Leu Leu Arg Pro Trp Arg Pro Leu Arg Ala 10 Arg Gly Cys Ala Ser Asp Gly Ala Ala Gly Gly Ser Glu Ile Gln Val Arg Ala Leu Ala Gly Pro Asp Gln Gly Ile Thr Glu Ile Leu Met Asn Arg Pro Ser Ala Arg Asn Ala Leu Gly Asn Val Phe Val Ser Glu Leu Leu Glu Thr Leu Ala Gln Leu Arg Glu Asp Arg Gln Val Arg Val Leu Leu Phe Arg Ser Gly Val Lys Gly Val Phe Cys Ala Gly Ala Asp Leu Lys Glu Arg Glu Gln Met Ser Glu Ala Glu Val Gly Val Phe Val Gln 105 Arg Leu Arg Gly Leu Met Asn Asp Ile Ala Ala Phe Pro Ala Pro Thr 120 Ile Ala Ala Met Asp Gly Phe Ala Leu Gly Gly Gly Leu Glu Leu Ala 135 Leu Ala Cys Asp Leu Arg Val Ala Ala Ser Ser Ala Val Met Gly Leu 145 150 Ile Glu Thr Thr Arg Gly Leu Leu Pro Gly Ala Gly Gly Thr Gln Arg 170 Leu Pro Arg Cys Leu Gly Val Ala Leu Ala Lys Glu Leu Ile Phe Thr Gly Arg Arg Leu Ser Gly Thr Glu Ala His Val Leu Gly Leu Val Asn 200 His Ala Val Ala Gln Asn Glu Glu Gly Asp Ala Ala Tyr Gln Arg Ala Arg Ala Leu Ala Gln Glu Ile Leu Pro Gln Ala Pro Ile Ala Val Arg 230 235 Leu Gly Lys Val Ala Ile Asp Arg Gly Thr Glu Val Asp Ile Ala Ser 250 Gly Met Ala Ile Glu Gly Met Cys Tyr Ala Gln Asn Ile Pro Thr Arg

Gly Met Ala Ile Glu Gly Met Cys Tyr Ala Gln Asn Ile Pro Thr Arg 260 265 270

Asp Arg Leu Glu Gly Met Ala Ala Phe Arg Glu Lys Arg Thr Pro Lys 275 280 285

Phe Val Gly Lys 290

<210> 774 <211> 377 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (164) <223> Xaa equals any amino acid <220> <221> SITE <222> (213) <223> Xaa equals any amino acid <400> 774 Met Ala Thr Ala Met Asp Trp Leu Pro Trp Ser Leu Leu Leu Phe Ser 10 Leu Met Cys Glu Thr Ser Ala Phe Tyr Val Pro Gly Val Ala Pro Ile Asn Phe His Gln Asn Asp Pro Val Glu Ile Lys Ala Val Lys Leu Thr Ser Ser Arg Thr Gln Leu Pro Tyr Glu Tyr Tyr Ser Leu Pro Phe Cys 55 60 .... Gln Pro Ser Lys Ile Thr Tyr Lys Ala Glu Asn Leu Gly Glu Val Leu Arg Gly Asp Arg Ile Val Asn Thr Pro Phe Gln Val Leu Met Asn Ser Glu Lys Lys Cys Glu Val Leu Cys Ser Gln Ser Asn Lys Pro Val Thr Leu Thr Val Glu Gln Ser Arg Leu Val Ala Glu Arg Ile Thr Glu Asp 120 Tyr Tyr Val His Leu Ile Ala Asp Asn Leu Pro Val Ala Thr Arg Leu 135 Glu Leu Tyr Ser Asn Arg Asp Ser Asp Asp Lys Lys Glu Ser Asp Ile Lys Trp Xaa Ser Arg Trp Asp Thr Tyr Leu Thr Met Ser Asp Val Gln Ile His Trp Phe Ser Ile Ile Asn Ser Val Val Val Phe Phe 185 Leu Ser Gly Ile Leu Ser Met Ile Ile Ile Arg Thr Leu Arg Lys Asp 195 Ile Ala Asn Tyr Xaa Lys Glu Asp Asp Ile Glu Asp Thr Met Glu Glu Ser Gly Trp Lys Leu Val His Gly Asp Val Phe Arg Pro Pro Pro Val

230

225

235

Pro His Asp Pro Gln Leu Pro Ala Gly Leu Arg His Ser Ala Val Leu 245 250 255

Tyr Asp Pro His Arg His Leu Cys Ser His Ala Trp Asp Ala Val Ala 260 265 270

Leu Gln Pro Gly Ser Ser His Asp His Ser Leu Leu Pro Leu His Val 275 280 285

His Gly Gly Val Trp Arg Ile Phe Cys Trp Pro Ser Val Pro His Phe 290 295 300

Lys Arg Pro Ser Val Glu Glu Arg Ser Leu Leu Tyr Gly Asn Ser Val 305 310 315 320

Pro Trp Cys Gly Phe Trp His Leu Leu Arg Ile Glu Leu Leu His Leu 325 330 335

Gly Lys Ala Leu Ile Arg Ser Gly Ala Leu Ser His His Gly Gly Ser 340 345 350

Ala Val His Val Val Arg Asp Leu Pro Ala Pro Arg Leu Leu Gly Leu 355 360 365

Leu Leu Arg Leu Pro Lys Ala Ala Ile 370 375

<210> 775

<211> 121

<212> PRT

<213> Homo sapiens

<400> 775

Met Ile Met Ala Gln Lys Ile Gly Gly Leu Thr Trp Trp Ala Ile Met
1 5 10 15

Phe Ile Ile Leu Phe Glu Ile Thr Gly Thr Ser Ser Ser Phe Leu Arg 20 25 30

Ile Asn Ala Leu Pro His Phe Ser Met Asn Arg Cys Gly Glu Ala Tyr 35 40 45

Phe Pro Phe Ser Tyr Leu Tyr Thr Ser Leu Gln Lys Gln Phe Leu Met 50 55 60

Lys Val Ser Gly Ile Val Lys Asn Leu Arg Gly Asn Asp Asp Trp Arg 65 70 75 80

Cys Phe Gly Val Phe Phe Cys Ile His Phe Leu Met Arg Lys Val Leu 85 90 95

Asn Val Val Gln Val Arg Pro Asn Tyr Tyr Leu Thr Ile Ile Gly Arg 100 105 110

Phe Tyr Val Ser Val Lys Val Phe Lys 115 120

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<210> 776
<211> 84
<212> PRT
<213> Homo sapiens
<400> 776
Met Tyr Leu Ile His Leu Tyr Gln Val Leu Lys Tyr Leu Asp Lys Ser
                                                          15
                  5
                                     10
Lys Tyr Phe Val Phe Ser Phe Phe Leu Leu Ser Ile Leu Leu Thr Thr
Val Lys Arg Cys Ser Ile Leu Ile Trp Ser Val Leu Arg Arg Lys Thr
                             40
Met Lys Ala Glu Leu Val Cys Ala Thr Gln Ser Lys Pro Leu Leu Phe
Phe Trp Lys Asp Gly Val Met Phe Phe Lys Asp Ser Asn Lys Tyr Pro
                     70
Ala Val Ile Ser
<210> 777
<211> 42
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (9)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (15)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (18)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (22)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (28)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (29)
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<223> Xaa equals any amino acid

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<220>
 <221> SITE
 <222> (30)
 <223> Xaa equals any amino acid
 <220>
 <221> SITE
 <222> (32)
 <223> Xaa equals any amino acid
 <220>
 <221> SITE
 <222> (40)
 <223> Xaa equals any amino acid
 <400> 777
 Met Leu Phe Leu Val Phe Ser Leu Xaa Leu Leu Lys Pro Leu Xaa Phe
 Phe Xaa Phe Gly Gly Xaa Arg Ile Val Asn Ile Xaa Xaa Xaa Gln Xaa
                                  25
 Gln His His Ala Glu Gly Lys Xaa Gly Ser
<210> 778
 <211> 50
 <212> PRT
 <213> Homo sapiens
 Met Tyr Ile Tyr Leu Ile His Leu Cys Met Cys Val Tyr Ile Tyr Ile
 Tyr Ile Leu Leu Ile Ile Tyr Thr Leu Asp Pro Glu Pro Pro Ser Trp
                                  25
 Ser Pro Lys Leu Asp Ser His Leu Ser Leu Arg Gln Pro Ser Asn Asp
 Arg Phe
      50
 <210> 779
 <211> 82
 <212> PRT
 <213> Homo sapiens
 <400> 779
 Met Asn Arg Ser Thr Arg Ser Tyr Arg Cys Trp Ala Thr Trp Pro Arg
 Leu Gly Trp Ala Leu Pro Cys Cys Met Asn Ser Leu Arg Lys Gly Arg
 Lys Phe Ser Gln Ile Thr Thr Ser Leu Met Ala Ser Val Ser Ser Ala
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Ser Met Val Ser Arg Arg Arg Pro Leu Pro Lys His Pro Val Thr 50 55 60

Thr Thr Ser Thr Ala Thr Ala Leu Leu Gly Thr Ser Ser Thr Trp Ser 65 70 75 80

Lys Ser

<210> 780

<211> 112

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (69)

<223> Xaa equals any amino acid

<400> 780

Met Pro Val Leu Pro Gly Arg Thr Thr Ala Leu Leu Ser Leu Thr Leu

1 5 10 15

Ala Phe Ala Val Pro Cys Ser Gly Val Glu Ala Gly Pro Cys Val Pro 20 25 30

Arg Ser His Gly Cys Ser Ser Trp Glu Ala Ser Val Cys Val Thr Ser 35 40 45

Ser Thr Pro Gly Gly Ser Trp Arg Ala Arg Ala Leu Phe Pro Ser Ala 50 60

Ala Trp His Arg Xaa Ala Ala Trp Asp Ser Pro Trp Thr Gln Thr Gly 65 70 75 80

Asp Phe Ala Arg Gly Ala Met Gly Gly Ala Gly Ala Leu Pro Gly Gly 85 90 95

Cys Val Cys Ile Ser Gly Arg Pro Arg Ala Gln Lys Leu Pro Ala Leu 100 105 110

<210> 781

<211> 44

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any amino acid

<220>

<221> SITE

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<222> (34)
<223> Xaa equals any amino acid
<400> 781
Met Val Leu His Cys Ile Ala Trp Leu Gln Xaa Gly Ile Ser Phe Leu
Phe Leu Phe Leu Cys Val Ile Ala Ile Gly Ala Thr Asn Phe Ala Ser
Pro Xaa Phe Tyr Lys Leu Val Ser Ser Gly Val Ala
<210> 782
<211> 89
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (12)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (13)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (72)
<223> Xaa equals any amino acid
<400> 782
Met Ser Gly Gly Leu Ser Phe Leu Leu Leu Val Xaa Xaa Gly Thr Gln
Ser Pro Leu His Leu Ala Gly Ser Cys Pro Gly Gln Thr His Leu Ser
Phe Pro Leu Gly Gln Asp Arg Gly Gln Gln Leu Gln Gln Lys Gln Gln
Asp Leu Glu Gln Glu Gly Leu Glu Ala Thr Gln Gly Leu Leu Ala Gly
Glu Trp Ala Pro Pro Leu Trp Xaa Leu Gly Ser Leu Phe Gln Ala Phe
                                         75
Val Lys Arg Glu Ser Gln Ala Tyr Ala
                 85
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<210> 783 <211> 44 <212> PRT

<213> Homo sapiens

<400> 783

Met Leu Phe Phe Cys Leu Leu Met Lys Met Leu Gly Pro Ser Arg Leu 1 5 10 15

Pro Phe Leu Ala Leu Thr Leu Cys Arg Phe Ile Leu Tyr Phe Gln Phe 20 25 30

Cys Tyr Leu Ile Ser Asp Ser Ser Pro Asp His Ser 35 40

<210> 784

<211> 55

<212> PRT

<213> Homo sapiens

<400> 784

Met Ser His Cys Thr Trp Pro Val Cys Leu Phe Cys Leu Val Pro Pro 1 5 10 15

Pro Met Gly Asp Leu Lys Glu Val Cys Leu Pro His Arg Cys Pro Gly
20 25 30

Arg Thr Ala Cys Cys Ser Tyr Ser Glu Pro His Leu Gln Thr Glu Glu 35 40 45

Asp Arg Arg Thr Leu Ile Cys 50 55

<210> 785

<211> 508

<212> PRT

<213> Homo sapiens

<400> 785

Met Asp Pro Lys Leu Gly Arg Met Ala Ala Ser Leu Leu Ala Val Leu
1 5 10 15

Leu Leu Leu Leu Glu Arg Gly Met Phe Ser Ser Pro Ser Pro Pro 20 . 25 30

Pro Ala Leu Clu Lys Val Phe Gln Tyr Ile Asp Leu His Gln Asp
35 40 45

Glu Phe Val Gln Thr Leu Lys Glu Trp Val Ala Ile Glu Ser Asp Ser 50 55 60

Val Gln Pro Val Pro Arg Phe Arg Gln Glu Leu Phe Arg Met Met Ala 65 70 75 80

Val Ala Ala Asp Thr Leu Gln Arg Leu Gly Ala Arg Val Ala Ser Val 85 90 95

Asp Met Gly Pro Gln Gln Leu Pro Asp Gly Gln Ser Leu Pro Ile Pro
100 105 110

Pro Val Ile Leu Ala Glu Leu Gly Ser Asp Pro Thr Lys Gly Thr Val 115 120 125

Cys	130	TYL	GIÀ	nis	rea	135	vai	GIII	PIO	Ala	140	Arg	GIY	ASP	GIĀ
Trp 145	Leu	Thr	Asp	Pro	Tyr 150	Val	Leu	Thr	Glu	Val 155	Asp	Gly	Lys	Leu	Туг 160
Gly	Arg	Gly	Ala	Thr 165	Asp	Asn	Lys	Gly	Pro 170	Val	Leu	Ala	Trp	Ile 175	Asn
Ala	Val	Ser	Ala 180	Phe	Arg	Ala	Leu	Glu 185	Gln	Asp	Leu	Pro	Val 190	Asn	Ile
Lys	Phe	Ile 195	Ile	Glu	Gly	Met	Glu 200	Glu	Ala	Gly	Ser	Val 205	Ala	Leu	Glu
Glu	Leu 210	Val	Glu	Lys	Glu	Lys 215	Asp	Arg	Phe	Phe	Ser 220	Gly	Val	Asp	Tyr
Ile 225	Val	Ile	Ser	Asp	Asn 230	Leu	Trp	Ile	Ser	Gln 235	Arg	Lys	Pro	Ala	Ile 240
Thr	Tyr	Gly	Thr	Arg 245	Gly	Asn	Ser	Tyr	Phe 250	Met	<b>V</b> al	Glu	Val	Lys 255	Cys
Arg	Asp	Gln	Asp 260	Phe	His	Ser	Gly	Thr 265	Phe	Gly	Gly	Ile	Leu 270	His	Glu
Pro	Met	Ala 275	Asp	Leu	Val	Ala	Leu 280	Leu	Gly	Ser	Leu	Val 285	Asp	Ser	Ser
Gly	His 290	Ile	Leu	Val	Pro	Gly 295	Ile	Tyr	Asp	Glu	Val 300	Val	Pro	Leu	Thr
G1u 305	Glu	Glu	Ile	Asn	Thr 310	Tyr	Lys	Ala	Ile	His 315	Leu	Asp	Leu	Glu	Glu 320
Tyr	Arg	Asn	Ser	Ser 325	Arg	Val	Glu	Lys	Phe 330	Leu	Phe	Asp	Thr	Lys 335	Glu
Glu	Ile	Leu	Met 340	His	Leu	Trp	Arg	туr 345	Pro	Ser	Leu	Ser	Ile 350	His	Gly
Ile	Glu	Gly 355	Ala	Phe	Asp	Glu	Pro 360	Gly	Thr	Lys	Thr	Val 365	Ile	Pro	Gly
Arg	Val 370	Ile	Gly	Lys	Phe	Ser 375	Ile	Arg	Leu	Val	Pro 380	His	Met	Asn	Val
Ser 385	Ala	Val	Glu	Lys	Gln 390	Val	Thr	Arg	His	Leu 395	Glu	Asp	Val	Phe	Ser 400
Lys	Arg	Asn	Ser	Ser 405	Asn	Lys	Met	Val	Val 410	Ser	Met	Thr	Leu	Gly 415	Leu
His	Pro	Trp	Ile 420	Ala	Asn	Ile	Asp	Asp 425	Thr	Gln	Tyr	Leu	Ala 430	Ala	Lys
Arg	Ala	Ile 435	Arg	Thr	<b>V</b> al	Phe	Gly 440	Thr	Glu	Pro	Asp	Met 445	Ile	Arg	Asp

Gly Ser Thr Ile Pro Ile Ala Lys Met Phe Gln Glu Ile Val His Lys 450 455 460

Ser Val Val Leu Ile Pro Leu Gly Ala Val Asp Asp Gly Glu His Ser 465 470 475 480

Gln Asn Glu Lys Ile Asn Arg Trp Asn Tyr Ile Glu Gly Thr Lys Leu 485 490 495

Phe Ala Ala Phe Phe Leu Glu Met Ala Gln Leu His 500 505

<210> 786

<211> 56

<212> PRT

<213> Homo sapiens

<400> 786

Met Cys Phe Thr Gln Phe Ser Arg Ile Phe Phe Leu Thr Ser Ser Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Thr Leu Ala Ala Cys Ala Asn His Ile Leu Ala Ala Tyr Ser Ser Ser 20 25 30

Leu Ala Asp Arg Cys Val Gly Glu Lys Ser Leu Ile Val Ile Val Pro 35 40 45

Glu Arg Ser Phe Gln Thr His Phe 50 55

<210> 787

<211> 77

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (69)

<223> Xaa equals any amino acid

<400> 787

Met Thr Gly Gln Ile Pro Arg Leu Ser Lys Val Asn Leu Phe Thr Leu 1 5 10 15

Leu Ser Leu Trp Met Glu Leu Phe Pro Ala Glu Ala Gln Arg Gln Lys 20 25 30

Ser Gln Lys Asn Glu Glu Gly Lys His Gly Pro Leu Gly Asp Asn Glu 35 40 45

Glu Arg Thr Arg Val Ser Thr Asp Lys Arg Gln Asp Tyr Trp Glu Gln 50 55 60

Leu Arg Cys Leu Xaa Glu Arg Phe Thr Ile Thr Ala Gly 65 70 75

Met Trp Trp Trp Leu Met Leu Ala Thr Thr Ala Leu Lys Pro Ile Ala

Thr Ser Ser Ser Cys Thr Glu Ala Leu Pro Gly Leu Trp Arg Asp Arg
20 25 30

His Trp Gly Asp Trp Thr Arg Gly Ser Gly Trp Glu Val Gly Gln Thr 35 40 45

Met Arg Leu Arg Asn Gly Thr Val Ala Thr Ala Leu Ala Phe Ile Thr 1 5 10 15

Ser Phe Leu Thr Leu Ser Trp Tyr Thr Thr Trp Gln Asn Gly Lys Gly 20 25 30

Lys Glu Asn Asp Ser Glu Asn Val His Glu Met Tyr 35 40

<210> 790

<211> 327

<212> PRT

<213> Homo sapiens

<400> 790

Met Ala Cys Arg Lys Leu Ala Val Ala His Pro Leu Leu Leu Arg
1 5 10 15

His Leu Pro Met Ile Ala Ala Leu Leu His Gly Arg Thr His Leu Asn  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$ 

Phe Gln Glu Phe Arg Gln Gln Asn His Leu Ser Cys Phe Leu His Val . 35 40 45

Leu Gly Leu Leu Glu Leu Leu Gln Pro His Val Phe Arg Ser Glu His 50 55 60

Gln Gly Ala Leu Trp Asp Cys Leu Leu Ser Phe Ile Arg Leu Leu Leu 65 70 75 80

Asn Tyr Arg Lys Ser Ser Arg His Leu Ala Ala Phe Ile Asn Lys Phe 85 90 95

Val Gln Phe Ile His Lys Tyr Ile Thr Tyr Asn Ala Pro Ala Ala Ile 105 Ser Phe Leu Gln Lys His Ala Asp Pro Leu His Asp Leu Ser Phe Asp Asn Ser Asp Leu Val Met Leu Lys Ser Leu Leu Ala Gly Leu Ser Leu Pro Ser Arg Asp Asp Arg Thr Asp Arg Gly Leu Asp Glu Glu Gly Glu 150 Glu Glu Ser Ser Ala Gly Ser Leu Pro Leu Val Ser Val Ser Leu Phe 165 170 Thr Pro Leu Thr Ala Ala Glu Met Ala Pro Tyr Met Lys Arg Leu Ser 185 Arg Gly Gln Thr Val Glu Asp Leu Leu Glu Val Leu Ser Asp Ile Asp 200 Glu Met Ser Arg Arg Pro Glu Ile Leu Ser Phe Phe Ser Thr Asn Leu Gln Arg Leu Met Ser Ser Ala Glu Glu Cys Cys Arg Asn Leu Ala 230 235 Phe Ser Leu Ala Leu Arg Ser Met Gln Asn Ser Pro Ser Ile Ala Ala Ala Phe Leu Pro Thr Phe Met Tyr Cys Leu Gly Ser Gln Asp Phe Glu 265 Val Val Gln Thr Ala Leu Arg Asn Leu Pro Glu Tyr Ala Leu Leu Cys ` 280 Gln Glu His Ala Ala Val Leu Leu His Arg Ala Phe Leu Val Gly Met Tyr Gly Gln Met Asp Pro Ser Ala Gln Ile Ser Glu Ala Leu Arg Ile 315

<210> 791

<211> 56

<212> PRT

<213> Homo sapiens

Leu His Met Glu Ala Val Met

325

<400> 791

Met Thr Phe Leu Leu Gln Trp Phe Pro Leu Gly Arg Ala Arg Val Val

Gly Asp Leu Cys Gly Phe Ser Thr Gln Ile His Pro Gly Val Ser Arg

Ala Gly Met Ala Asp Leu Glu Ser Pro Pro Phe Pro Arg Thr Cys Ser

35 40 45

Val Pro Arg Ala Ala Asn Lys Gly
50 55

<210> 792

<211> 91

<212> PRT

<213> Homo sapiens

<400> 792

Met Gly Asp Lys Leu Gly Met Ala Arg Ala Pro Ser Val Ala Leu Ala 1 5 10 15

Gln Leu Trp Leu Ile Cys Leu Cys Pro Glu Ser Leu Ala Ser Phe Val 20 25 30

Gln Ala Val Pro Trp Lys Val Leu Gln Pro Ser Ser Asn Arg Ser Thr 35 40 45

Asp Cys Ser Pro His Met Arg Pro Thr Cys Glu Thr Leu Gly Ser Arg 50 55 60

Lys Ala Gln Asp Leu Val Leu Asp Thr Met Cys Leu Ser Thr Asp Asp 65 70 75 80

Cys Gln Gly Leu Ile Cys Arg Gly His Arg Ser 85 90

<210> 793

<211> 47

<212> PRT

<213> Homo sapiens

<400> 793

Met Gly Val Leu Leu Phe Ser Phe Phe Phe Pro Asn Gly Ser Phe 1 5 10 15

Ser Pro Val Val Leu Pro Ser Tyr Phe Pro Asn Ser Ser Ser Tyr Phe  $20 \\ 25 \\ 30$ 

Val Phe Cys Thr Ser Phe Trp Arg Pro Leu Ser Phe Gln Lys Gly 35 40

<210> 794

<211> 243

<212> PRT

<213> Homo sapiens

<400> 794

Met Gly Thr Leu Pro Trp Leu Leu Ala Phe Phe Ile Leu Gly Leu Gln 1 5 10 15

Ala Trp Asp Thr Pro Thr Ile Val Ser Arg Lys Glu Trp Gly Ala Arg
20 25 30

Pro Leu Ala Cys Arg Ala Leu Leu Thr Leu Pro Val Ala Tyr Ile Ile 35 40 45

Thr Asp Gln Leu Pro Gly Met Gln Cys Gln Gln Gln Ser Val Cys Ser 50 60

Gln Met Leu Arg Gly Leu Gln Ser His Ser Val Tyr Thr Ile Gly Trp
65 70 75 80

Cys Asp Val Ala Tyr Asn Phe Leu Val Gly Asp Asp Gly Arg Val Tyr 85 90 95

Glu Gly Val Gly Trp Asn Ile Gln Gly Leu His Thr Gln Gly Tyr Asn 100 105 110

Asn Ile Ser Leu Gly Ile Ala Phe Phe Gly Asn Lys Ile Ser Ser Ser 115 120 125

Pro Ser Pro Ala Ala Leu Ser Ala Ala Glu Gly Leu Ile Ser Tyr Ala 130 135 140

Ile Gln Lys Gly His Leu Ser Pro Arg Tyr Ile Gln Pro Leu Leu 145 150 155 160

Lys Glu Glu Thr Cys Leu Asp Pro Gln His Pro Val Met Pro Arg Lys 165 170 175

Val Cys Pro Asn Ile Ile Lys Arg Ser Ala Trp Glu Ala Arg Glu Thr 180 185 190

His Cys Pro Lys Met Asn Leu Pro Ala Lys Tyr Val Ile Ile His 195  $200 \cdot 205$ 

Thr Ala Gly Thr Ser Cys Thr Val Ser Thr Asp Cys Gln Thr Val Val 210 215 220

Arg Asn Ile Gln Ser Phe His Met Asp Thr Arg Asn Phe Cys Asp Ile 225 230 235 240

Gly Tyr Gln

<210> 795

<211> 80

<212> PRT

<213> Homo sapiens

<400> 795

Met Lys Leu Ser Gly Met Phe Leu Leu Leu Ser Leu Ala Leu Phe Cys 1 5 10 15

Phe Leu Thr Gly Val Phe Ser Gln Gly Gly Gln Val Asp Cys Gly Glu 20 25 30

Phe Gln Asp Thr Lys Val Tyr Cys Thr Arg Glu Ser Asn Pro His Cys 35 40 45

Gly Ser Asp Gly Gln Thr Tyr Gly Asn Lys Cys Ala Phe Cys Lys Ala

50 55 60

Ile Val Lys Ser Gly Gly Lys Ile Ser Leu Lys His Pro Gly Lys Cys 65 70 75 80

<210> 796

<211> 301

<212> PRT

<213> Homo sapiens

<400> 796

Met Ala Arg His Gly Leu Pro Leu Leu Pro Leu Leu Ser Leu Leu Val 1 5 10 15

Gly Ala Trp Leu Lys Leu Gly Asn Gly Gln Ala Thr Ser Met Val Gln 20 25 30

Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser Arg
35 40 45

Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala Ile 50 55 60

Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg Glu 65 70 75 80

Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val Phe 85 90 95

Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro Met
100 105 110

Lys Ser Val Leu Trp Trp Leu Pro Val Glu Lys Ala Phe Trp Arg Gln
115 120 125

Pro Ala Gly Pro Gly Ser Gly Ile Arg Glu Arg Leu Glu His Pro Val 130 135 140

Leu His Val Ser Trp Asn Asp Ala Arg Ala Tyr Cys Ala Trp Arg Gly 145 150 155 160

Lys Arg Leu Pro Thr Glu Glu Glu Trp Glu Phe Ala Ala Arg Gly Gly
165 170 175

Leu Lys Gly Gln Val Tyr Pro Trp Gly Asn Trp Phe Gln Pro Asn Arg 180 185 190

Thr Asn Leu Trp Gln Gly Lys Phe Pro Lys Gly Asp Lys Ala Glu Asp 195 200 205

Gly Phe His Gly Val Ser Pro Val Asn Ala Phe Pro Ala Gln Asn Asn 210 215 220

Tyr Gly Leu Tyr Asp Leu Leu Gly Asn Val Trp Glu Trp Thr Ala Ser 225 230 235 240

Pro Tyr Gln Ala Ala Glu Gln Asp Met Arg Val Leu Arg Gly Ala Ser 245 250 255

Trp Ile Asp Thr Ala Asp Gly Ser Ala Asn His Arg Ala Arg Val Thr 260 265 270

Thr Arg Met Gly Asn Thr Pro Asp Ser Ala Ser Asp Asn Leu Gly Phe 275 280 285

Arg Cys Ala Ala Asp Ala Gly Arg Pro Pro Gly Glu Leu 290 295 300

<210> 797

<211> 275

<212> PRT

<213> Homo sapiens

<400> 797

Met Gly Asn Phe Arg Gly His Ala Leu Pro Gly Thr Phe Phe Ile 1 5 10 15

Ile Gly Leu Trp Trp Cys Thr Lys Ser Ile Leu Lys Tyr Ile Cys Lys 20 25 30

Lys Gln Lys Arg Thr Cys Tyr Leu Gly Ser Lys Thr Leu Phe Tyr Arg
35 40 45

Leu Glu Ile Leu Glu Gly Ile Thr Ile Val Gly Met Ala Leu Thr Gly 50 55 60

Met Ala Gly Glu Gln Phe Ile Pro Gly Gly Pro His Leu Met Leu Tyr 65 70 75 80

Asp Tyr Lys Gln Gly His Trp Asn Gln Leu Leu Gly Trp His His Phe 85 90 95

Thr Met Tyr Phe Phe Phe Gly Leu Leu Gly Val Ala Asp Ile Leu Cys 100 105 110

Phe Thr Ile Ser Ser Leu Pro Val Ser Leu Thr Lys Leu Met Leu Ser 115 120 125

Asn Ala Leu Phe Val Glu Ala Phe Ile Phe Tyr Asn His Thr His Gly 130 135 140

Arg Glu Met Leu Asp Ile Phe Val His Gln Leu Leu Val Leu Val Val 145 150 155 160

Phe Leu Thr Gly Leu Val Ala Phe Leu Glu Phe Leu Val Arg Asn Asn 165 170 175

Val Leu Leu Glu Leu Leu Arg Ser Ser Leu Ile Leu Leu Gln Gly Ser 180 185 190

Trp Phe Phe Gln Ile Gly Phe Val Leu Tyr Pro Pro Ser Gly Gly Pro

Ala Trp Asp Leu Met Asp His Glu Asn Ile Leu Phe Leu Thr Ile Cys 210 215 220

Phe Cys Trp His Tyr Ala Val Thr Ile Val Ile Val Gly Met Asn Tyr 225 230 235 240

Ala Phe Ile Thr Trp Leu Val Lys Ser Arg Leu Lys Arg Leu Cys Ser 245 250 255

Ser Glu Val Gly Leu Leu Lys Asn Ala Glu Arg Glu Gln Glu Ser Glu 260 265 270

Glu Glu Met 275

<210> 798

<211> 438

<212> PRT

<213> Homo sapiens

<400> 798

Met Pro Cys Thr Cys Thr Trp Arg Asn Trp Arg Gln Trp Ile Arg Pro
1 5 10 15

Leu Val Ala Val Ile Tyr Leu Val Ser Ile Val Val Ala Val Pro Leu 20 25 30

Cys Val Trp Glu Leu Gln Lys Leu Glu Val Gly Ile His Thr Lys Ala 35 40 45

Trp Phe Ile Ala Gly Ile Phe Leu Leu Thr Ile Pro Ile Ser Leu 50 55 60

Trp Val Ile Leu Gln His Leu Val His Tyr Thr Gln Pro Glu Leu Gln 65 70 75 80

Lys Pro Ile Ile Arg Ile Leu Trp Met Val Pro Ile Tyr Ser Leu Asp 85 90 95

Ser Trp Ile Ala Leu Lys Tyr Pro Gly Ile Ala Ile Tyr Val Asp Thr . 100 105 110

Cys Arg Glu Cys Tyr Glu Ala Tyr Val Ile Tyr Asn Phe Met Gly Phe 115 120 125

Leu Thr Asn Tyr Leu Thr Asn Arg Tyr Pro Asn Leu Val Leu Ile Leu 130 135 140

Glu Ala Lys Asp Gln Gln Lys His Phe Pro Pro Leu Cys Cys Cys Pro 145 150 155 160

Pro Trp Ala Met Gly Glu Val Leu Leu Phe Arg Cys Lys Leu Gly Val 165 170 175

Leu Gln Tyr Thr Val Val Arg Pro Phe Thr Thr Ile Val Ala Leu Ile 180 185 190

Cys Glu Leu Leu Gly Ile Tyr Asp Glu Gly Asn Phe Ser Phe Ser Asn 195 200 205

Ala Trp Thr Tyr Leu Val Ile Ile Asn Asn Met Ser Gln Leu Phe Ala

210 215 220

Met Tyr Cys Leu Leu Leu Phe Tyr Lys Val Leu Lys Glu Glu Leu Ser 225 230 235 240

Pro Ile Gln Pro Val Gly Lys Phe Leu Cys Val Lys Leu Val Val Phe 245 250 255

Val Ser Phe Trp Gln Ala Val Val Ile Ala Leu Leu Val Lys Val Gly 260 265 270

Val Ile Ser Glu Lys His Thr Trp Glu Trp Gln Thr Val Glu Ala Val 275 280 285

Ala Thr Gly Leu Gln Asp Phe Ile Ile Cys Ile Glu Met Phe Leu Ala 290 295 300

Ala Ile Ala His His Tyr Thr Phe Ser Tyr Lys Pro Tyr Val Glu Glu 305 310 315 320

Ala Glu Glu Gly Ser Cys Phe Asp Ser Phe Leu Ala Met Trp Asp Val 325 330 335

Ser Asp Ile Arg Asp Asp Ile Ser Glu Gln Val Arg His Val Gly Arg 340 345 350

Thr Val Arg Gly His Pro Arg Lys Lys Leu Phe Pro Glu Asp Gln Asp 355 360 365

Gln Asn Glu His Thr Ser Leu Leu Ser Ser Ser Ser Gln Asp Ala Ile 370 375 380

Ser Ile Ala Ser Ser Met Pro Pro Ser Pro Met Gly His Tyr Gln Gly 385 390 395 400

Phe Gly His Thr Val Thr Pro Gln Thr Thr Pro Thr Thr Ala Lys Ile 405 410 415

Ser Asp Glu Ile Leu Ser Asp Thr Ile Gly Glu Lys Lys Glu Pro Ser 420 425 430

Asp Lys Ser Val Asp Ser 435

<210> 799

<211> 43

<212> PRT

<213> Homo sapiens

<400> 799

Met Leu Thr Cys Ile Asp Met Asp Trp Lys Val Leu Thr Trp Leu Arg

1 5 10 15

Tyr Thr Leu Trp Ile Pro Leu Tyr Pro Leu Gly Met Phe Gly Gly Ser 20 25 30

Cys Leu Ser Asp Ser Val His Ser Asn Ile Gln
35

<210> 800

<211> 107

<212> PRT

<213> Homo sapiens

<400> 800

Met Val Arg Tyr Thr Tyr Ser Met Leu Ser Val Ile Gly Ile Ser Tyr 1 5 10 15

Ala Val Leu Thr Trp Leu Ser Gln Thr Leu Trp Met Pro Ile Tyr Pro
20 25 30

Leu Cys Val Leu Ala Glu Ala Phe Ala Ile Tyr Gln Ser Leu Pro Tyr 35 40 45

Phe Glu Ser Phe Gly Thr Tyr Ser Thr Lys Leu Pro Phe Asp Leu Ser 50 55 60

Ile Tyr Phe Pro Tyr Val Leu Lys Ile Tyr Leu Met Met Leu Phe Ile 65 70 75 80

Gly Met Tyr Phe Thr Tyr Ser His Leu Tyr Ser Glu Arg Arg Asp Ile 85 · 90 95

Leu Gly Ile Phe Pro Ile Lys Lys Lys Met 100 105

<210> 801

<211> 234

<212> PRT

<213> Homo sapiens

<400> 801

Met Arg Ile Arg Phe Thr Ser Pro His Pro Lys Asp Phe Pro Asp Glu

1 10 15

Val Leu Gln Leu Ile His Glu Arg Asp Asn Ile Cys Lys Gln Ile His 20 25 30

Leu Pro Ala Gln Ser Gly Ser Ser Arg Val Leu Glu Ala Met Arg Arg 35 40 45

Gly Tyr Ser Arg Glu Ala Tyr Val Glu Leu Val His His Ile Arg Glu 50 55 60

Ser Ile Pro Gly Val Ser Leu Ser Ser Asp Phe Ile Ala Gly Phe Cys 65 70 75 80

Gly Glu Thr Glu Glu Asp His Val Gln Thr Val Ser Leu Leu Arg Glu 85 90 95

Val Gln Tyr Asn Met Gly Phe Leu Phe Ala Tyr Ser Met Arg Gln Lys 100 105 110

Thr Arg Ala Tyr His Arg Leu Lys Asp Asp Val Pro Glu Glu Val Lys 115 120 125

Leu Arg Arg Leu Glu Glu Leu Ile Thr Ile Phe Arg Glu Glu Ala Thr 130 140

Lys Ala Asn Gln Thr Ser Val Gly Cys Thr Gln Leu Val Leu Val Glu 145 150 155 160

Gly Leu Ser Lys Arg Ser Ala Thr Asp Leu Cys Gly Arg Asn Asp Gly 165 170 175

Asn Leu Lys Val Ile Phe Pro Asp Ala Glu Met Glu Asp Val Asn Asn 180 185 190

Pro Gly Leu Arg Val Arg Ala Gln Pro Gly Asp Tyr Val Leu Val Lys 195 200 205

Ile Thr Ser Ala Ser Ser Gln Thr Leu Arg Gly His Val Leu Cys Arg 210 215 220

Thr Thr Leu Arg Asp Ser Ser Ala Tyr Cys 225 230

<210> 802

<211> 470

<212> PRT

<213> Homo sapiens

<400> 802

Met Trp Phe Thr Tyr Leu Leu Leu Tyr Leu His Ser Val Arg Ala Tyr 1 5 10 15

Ser Ser Arg Gly Ala Gly Leu Leu Leu Leu Gly Gln Val Ala Asp  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$ 

Gly Leu Cys Thr Pro Leu Val Gly Tyr Glu Ala Asp Arg Ala Ala Ser 35 40 45

Cys Cys Ala Arg Tyr Gly Pro Arg Lys Ala Trp His Leu Val Gly Thr 50 55 60

Val Cys Val Leu Leu Ser Phe Pro Phe Ile Phe Ser Pro Cys Leu Gly 65 70 75 80

Cys Gly Ala Ala Thr Pro Glu Trp Ala Ala Leu Leu Tyr Tyr Gly Pro 85 90 95

Phe Ile Val Ile Phe Gln Phe Gly Trp Ala Ser Thr Gln Ile Ser His 100 105 110

Leu Ser Leu Ile Pro Glu Leu Val Thr Asn Asp His Glu Lys Val Glu 115 120 125

Leu Thr Ala Leu Arg Tyr Ala Phe Thr Val Val Ala Asn Ile Thr Val
130 135 140

Tyr Gly Ala Ala Trp Leu Leu Leu His Leu Gln Gly Ser Ser Arg Val 145 150 155 160

Glu Pro Thr Gln Asp Ile Ser Ile Ser Asp Gln Leu Gly Gly Gln Asp 165 170 175

Val Pro Val Phe Arg Asn Leu Ser Leu Leu Val Val Gly Val Gly Ala

185 Val Phe Ser Leu Leu Phe His Leu Gly Thr Arg Glu Arg Arg Pro His Ala Glu Glu Pro Gly Glu His Thr Pro Leu Leu Ala Pro Ala Thr Ala Gln Pro Leu Leu Trp Lys His Trp Leu Arg Glu Pro Ala Phe Tyr Gln Val Gly Ile Leu Tyr Met Thr Thr Arg Leu Ile Val Asn Leu 250 Ser Gln Thr Tyr Met Ala Met Tyr Leu Thr Tyr Ser Leu His Leu Pro 265 Lys Lys Phe Ile Ala Thr Ile Pro Leu Val Met Tyr Leu Ser Gly Phe Leu Ser Ser Phe Leu Met Lys Pro Ile Asn Lys Cys Ile Gly Arg Asn Met Thr Tyr Phe Ser Gly Leu Leu Val Ile Leu Ala Phe Ala Ala Trp 310 315 Val Ala Leu Ala Glu Gly Leu Gly Val Ala Val Tyr Ala Ala Ala Val Leu Leu Gly Ala Gly Cys Ala Thr Ile Leu Val Thr Ser Leu Ala Met 345 Thr Ala Asp Leu Ile Gly Pro His Thr Asn Ser Gly Ala Phe Val Tyr

Thr Ala Asp Leu Ile Gly Pro His Thr Asn Ser Gly Ala Phe Val Tyr 355 360 365

Gly Ser Met Ser Phe Leu Asp Lys Val Ala Asn Gly Leu Ala Val Met 370 375 380

Ala Ile Gln Ser Leu His Pro Cys Pro Ser Glu Leu Cys Cys Arg Ala 385 390 395 400

Cys Val Ser Phe Tyr His Trp Ala Met Val Ala Val Thr Gly Gly Val 405 410 415

Gly Val Ala Ala Ala Leu Cys Leu Cys Ser Leu Leu Leu Trp Pro Thr 420 425 430

Arg Leu Arg Arg Ser Arg Gly Glu His Arg Thr Pro Ser Glu Gly
435 440 445

Glu Gly Ile Ser Thr Ala Pro Pro Pro Cys Trp Asn Glu Thr Gln Pro
450 455 460

Gln Gly Gly Ala Lys Leu 465 470

<210> 803

```
<211> 93
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (59)
 <223> Xaa equals any amino acid
 <220>
 <221> SITE
 <222> (61)
 <223> Xaa equals any amino acid
 <220>
 <221> SITE
 <222> (84)
 <223> Xaa equals any amino acid
 <400> 803
 Met Gly His Leu Pro His Ile Leu Ser Leu Gly Leu Phe Leu Thr Leu
  Leu Met Phe Cys Ile Thr Lys Ser Asp Gly Gln Asn Lys Ile Tyr Arg
. Cys Phe Lys Lys Ala Ser Pro Gln Val Ile Val Thr His Thr Lys Met
                               40
  Arg Ile Ala Ala Ile Ile Cys Ser Tyr Trp Xaa Gly Xaa Ala Asn Leu
  Gly Thr Arg Ile Lys Leu Gln Leu Asn Ser Ala Val Tyr Lys Ile Phe
  Val Ser Leu Xaa Arg Lys Arg Lys Arg Thr Leu Ser Trp
  <210> 804
  <211> 260
  <212> PRT
  <213> Homo sapiens
 <400> 804
  Met Ala Gly Ser Pro Leu Leu Trp Gly Pro Arg Ala Gly Gly Val Gly
  Leu Leu Val Leu Leu Leu Gly Leu Phe Arg Pro Pro Pro Ala Leu
                                   25
 Cys Ala Arg Pro Val Lys Glu Pro Arg Gly Leu Ser Ala Ala Ser Pro
  Pro Leu Ala Glu Thr Gly Ala Pro Arg Arg Phe Arg Arg Ser Val Pro
  Arg Gly Glu Ala Ala Gly Ala Val Gln Asp Leu Ala Arg Ala Leu Ala
                       70
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His Leu Leu Glu Ala Glu Arg Gln Glu Arg Ala Arg Ala Glu Ala Gln
85 90 95

Glu Ala Glu Asp Gln Gln Ala Arg Val Leu Ala Gln Leu Leu Arg Val 100 105 110

Trp Gly Ala Pro Arg Asn Ser Asp Pro Ala Leu Gly Leu Asp Asp Asp 115 120 125

Pro Asp Ala Pro Ala Ala Gln Leu Ala Arg Ala Leu Leu Arg Ala Arg 130 135 140

Leu Asp Pro Ala Ala Leu Ala Ala Gln Leu Val Pro Ala Pro Val Pro 145 150 155 160

Ala Ala Leu Arg Pro Arg Pro Pro Val Tyr Asp Asp Gly Pro Ala 165 170 175

Gly Pro Asp Ala Glu Glu Ala Gly Asp Glu Thr Pro Asp Val Asp Pro 180 \$185\$

Glu Leu Leu Arg Tyr Leu Leu Gly Arg Ile Leu Ala Gly Ser Ala Asp 195 200 205

Ser Glu Gly Val Ala Ala Pro Arg Arg Leu Arg Arg Ala Ala Asp His 210 215 220

Asp Val Gly Ser Glu Leu Pro Pro Glu Gly Val Leu Gly Ala Leu Leu 225 230 235 240

Arg Val Lys Arg Leu Glu Thr Pro Ala Pro Gln Val Pro Ala Arg Arg 245 250 255

Leu Leu Pro Pro 260

<210> 805

<211> 95

<212> PRT

<213> Homo sapiens

<400> 805

Met His Leu Cys Ile Cys Ala Val Trp Val Leu Val Ala Leu Leu Arg
1 5 10 15

Met His Gly Ala Ser Pro Ala Gln Thr Ser Gly Thr Arg Ser Gly Asn 20 25 30

Gly Gly Cys Arg Arg His Gly Ala Gly Gln Gly Arg Gly Ala Ala Thr

Gln Pro Leu Arg Pro Pro Arg Gly Thr Ala Ser Gly Gln Leu Met Ala 50 55 60

Leu Leu Ser Ala Leu Leu Pro Arg Leu Ser Gly Ser Ser Thr Pro Met 65 70 75 80

Met Ala His Gly Arg Pro Ala Pro Pro Gln Trp Ser Arg Val Ser 85 90 95

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<210> 806
    <211> 76
    <212> PRT
    <213> Homo sapiens
    <400> 806
    Met Thr Leu Tyr Ser Lys Leu Leu Trp Leu Phe Lys Gly Glu Leu Leu
    Phe Pro Leu Val Leu Ala Tyr Val Leu Leu Leu Tyr Ile Val Thr Lys
                                     25
    Phe Asn Tyr Leu Ile Leu Lys Leu Phe Pro Asn Lys Ile Gln Ile Lys
    Arg Gly Ser Ile Ala Ser Asn Arg Ser Leu Glu Ser Ser Ala Ser Leu
    Pro Ala Arg Lys Glu Glu Lys Leu Leu Lys Lys Phe
    <210> 807
<211> 69
    <212> PRT
    <213> Homo sapiens
    <400> 807
    Met Leu Leu Ser Lys Glu His Thr Ser Leu Gly Trp Leu Val Ile Phe
    Leu Thr Leu Ala Ser Gln Leu Ile Ser Tyr Gly Ser Arg Thr Gly Asn
                                    25
    Ser Arg Cys Pro Pro Cys Leu Tyr Arg Thr Leu His Thr Val Ser Thr
                               40
    Ser His Val Leu Ser Ser Leu Phe Val Ser Thr Phe Ser Gly Asp Glu
    Leu Val Trp Thr Thr
    <210> 808
    <211> 130
    <212> PRT
    <213> Homo sapiens
    <400> 808
    Met Glu Thr Leu Gly Ala Leu Leu Val Leu Glu Phe Leu Leu Leu Ser
    Pro Val Glu Ala Gln Gln Ala Thr Glu His Arg Leu Lys Pro Trp Leu
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Val Gly Leu Ala Ala Val Val Gly Phe Leu Phe Ile Val Tyr Leu Val
35 40 45

Leu Leu Ala Asn Arg Leu Trp Cys Ser Lys Ala Arg Ala Glu Asp Glu 50 55 60

Glu Glu Thr Thr Phe Arg Met Glu Ser Asn Leu Tyr Gln Asp Gln Ser 65 70 75 80

Glu Asp Lys Arg Glu Lys Lys Glu Ala Lys Glu Lys Glu Glu Lys Arg 85 90 95

Lys Lys Glu Lys Lys Thr Ala Lys Glu Gly Glu Ser Asn Leu Gly Leu 100 105 110

Asp Leu Glu Glu Lys Glu Pro Gly Asp His Glu Arg Ala Lys Ser Thr 115 120 125

Val Met 130

<210> 809

<211> 41

<212> PRT

<213> Homo sapiens

<400> 809

Met Asn Leu Ser Phe Leu Ser Phe Phe Leu Phe Phe Tyr Leu Leu Trp
1 5 10 15

Ser Pro Ala Glu Ser Val Tyr Lys Lys Gly Met Val Lys Lys Asn Leu 20 25 30

Ser His Ser Ile Val Glu Lys Ile Lys

<210> 810

<211> 113

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (38)

<223> Xaa equals any amino acid

<400> 810

Met Arg Pro Leu Leu Gly Gly Tyr Trp Val Leu Cys Leu Ser Val
1 5 10 15

Leu Gly His Ala Ala Leu Tyr His Phe Trp Leu Arg Glu Glu Gly Lys 20 25 30

Gly Pro Pro Gln Val Xaa Ser Val Leu Ala Leu Ala Leu Pro Ala Gly 35 40

Ser Cys Ala Pro Gly Leu Pro Phe Pro Gly Pro Leu Ile Pro Thr Gln

50 55 60

Leu Leu Phe Ala Leu Glu Trp Gly Thr Pro Thr Pro Leu Arg Asp His 65 70 75 80

Pro Pro His Ser Met His Ser Ala Pro Gln Asn Pro Pro Val Phe Leu 85 90 95

Gly Thr His Thr Cys Pro Pro Ser Trp Tyr Phe Arg Leu Ile Pro Gln 100 105 110

Ala

<210> 811

<211> 275

<212> PRT

<213> Homo sapiens

<400> 811

Met Thr Ile Thr Ser Phe Tyr Ala Val Cys Phe Tyr Leu Leu Met Leu 1 5 10 15

Val Met Val Glu Gly Phe Gly Gly Lys Glu Ala Val Leu Arg Thr Leu 20 25 30

Arg Asp Thr Pro Met Met Val His Thr Gly Pro Cys Cys Cys Cys Cys 35 40 45

Pro Cys Cys Pro Arg Leu Leu Thr Arg Lys Lys Leu Gln Leu Leu 50 55 60

Met Leu Gly Pro Phe Gln Tyr Ala Phe Leu Lys Ile Thr Leu Thr Leu 65 70 75 80

Val Gly Leu Phe Leu Ile Pro Asp Gly Ile Tyr Asp Pro Ala Asp Ile 85 90 95

Ser Glu Gly Ser Thr Ala Leu Trp Ile Asn Thr Phe Leu Gly Val Ser 100 105 110

Thr Leu Leu Ala Leu Trp Thr Leu Gly Ile Ile Ser Arg Gln Ala Arg 115 120 125

Leu His Leu Gly Glu Gln Asn Met Gly Ala Lys Phe Ala Leu Phe Gln 130 135 140

Val Leu Leu Ile Leu Thr Ala Leu Gln Pro Ser Ile Phe Ser Val Leu 145 150 155 160

Ala Asn Gly Gly Gln Ile Ala Cys Ser Pro Pro Tyr Ser Ser Lys Thr 165 170 175

Arg Ser Gln Val Met Asn Cys His Leu Leu Ile Leu Glu Thr Phe Leu 180 185 190

Met Thr Val Leu Thr Arg Met Tyr Tyr Arg Arg Lys Asp His Lys Val 195 200 205

Gly Tyr Glu Thr Phe Ser Ser Pro Asp Leu Asp Leu Asn Ser Lys Pro 210 215 220

Lys Val Asp Gly Leu Asp Asn Glu Arg Met Leu Tyr Ser Leu Glu Tyr 225 230 235 240

Lys Ile Pro Leu Leu Ser Leu Asn Leu Asp Gln Met Gly Ser Ile Pro 245 250 255

Pro Cys Gln His Lys Leu Ala Asp Thr Phe Asp Ser Thr Asp Glu Gly 260 265 270

Glu Gln Cys 275

<210> 812

<211> 161

<212> PRT

<213> Homo sapiens

<400> 812

Met Ala Leu Ser Leu Thr Leu Cys Phe Val Met Phe Trp Thr Pro Asn 1 5 10 15

Val Ser Glu Lys Ile Leu Ile Asp Ile Ile Gly Val Asp Phe Ala Phe 20 25 30

Ala Glu Leu Cys Val Val Pro Leu Arg Ile Phe Ser Phe Pro Val 35 40 45

Pro Val Thr Val Arg Ala His Leu Thr Gly Trp Leu Met Thr Leu Lys 50 55 60

Lys Thr Phe Val Leu Ala Pro Ser Ser Val Leu Arg Ile Ile Val Leu 65 70 75 80

Ile Ala Ser Leu Val Val Leu Pro Tyr Leu Gly Val His Gly Ala Thr 85 90 95

Leu Gly Val Gly Ser Leu Leu Ala Gly Phe Val Gly Glu Ser Thr Met 100 105 110

Val Ala Ile Ala Ala Cys Tyr Val Tyr Arg Lys Gln Lys Lys Met 115 120 125

Glu Asn Glu Ser Ala Thr Glu Gly Glu Asp Ser Ala Met Thr Asp Met 130 135 140

Pro Pro Thr Glu Glu Val Thr Asp Ile Val Glu Met Arg Glu Glu Asn 145 150 155 160

Glu

<210> 813

<211> 348

<212> PRT

<213> Homo sapiens

<400> 813

Met Asn Met Thr Gln Ala Arg Val Leu Val Ala Ala Val Val Gly Leu

1 5 10 15

Val Ala Val Leu Leu Tyr Ala Ser Ile His Lys Ile Glu Glu Gly His
20 25 30

Leu Ala Val Tyr Tyr Arg Gly Gly Ala Leu Leu Thr Ser Pro Ser Gly 35 40 45

Pro Gly Tyr His Ile Met Leu Pro Phe Ile Thr Thr Phe Arg Ser Val 50 60

Gln Thr Thr Leu Gln Thr Asp Glu Val Lys Asn Val Pro Cys Gly Thr
65 70 75 80

Ser Gly Gly Val Met Ile Tyr Ile Asp Arg Ile Glu Val Val Asn Met 85 90 95

Leu Ala Pro Tyr Ala Val Phe Asp Ile Val Arg Asn Tyr Thr Ala Asp 100 105 110

Tyr Asp Lys Thr Leu Ile Phe Asn Lys Ile His His Glu Leu Asn Gln 115 120 125

Phe Cys Ser Ala His Thr Leu Gln Glu Val Tyr Ile Glu Leu Phe Asp 130 135 140

Gln Ile Asp Glu Asn Leu Lys Gln Ala Leu Gln Lys Asp Leu Asn Leu 145 150 155 160

Met Ala Pro Gly Leu Thr Ile Gln Ala Val Arg Val Thr Lys Pro Lys 165 170 175

Ile Pro Glu Ala Ile Arg Arg Asn Phe Glu Leu Met Glu Ala Glu Lys 180 185 190

Thr Lys Leu Leu Ile Ala Ala Gln Lys Gln Lys Val Val Glu Lys Glu 195 200 205

Ala Glu Thr Glu Arg Lys Lys Ala Val Ile Glu Ala Glu Lys Ile Ala 210 215 220

Gln Val Ala Lys Ile Arg Phe Gln Gln Lys Val Met Glu Lys Glu Thr 225 230 235 240

Glu Lys Arg Ile Ser Glu Ile Glu Asp Ala Ala Phe Leu Ala Arg Glu 245 250 255

Lys Ala Lys Ala Asp Ala Glu Tyr Tyr Ala Ala His Lys Tyr Ala Thr 260 265 270

Ser Asn Lys His Lys Leu Thr Pro Glu Tyr Leu Glu Leu Lys Lys Tyr 275 280 285

Gln Ala Ile Ala Ser Asn Ser Lys Ile Tyr Phe Gly Ser Asn Ile Pro 290 295 300

Asn Met Phe Val Asp Ser Ser Cys Ala Leu Lys Tyr Ser Asp Ile Arg

305 310 315 320

Thr Gly Arg Glu Ser Ser Leu Pro Ser Lys Glu Ala Leu Glu Pro Ser 325 330 335

Gly Glu Asn Val Ile Gln Asn Lys Glu Ser Thr Gly 340 345

<210> 814

<211> 44

<212> PRT

<213> Homo sapiens

<400> 814

Met Pro Leu Cys Gly Leu Tyr Cys Leu Arg Ile Leu Met Phe Pro Leu 1 5 10 15

Arg Ser Ala Asn Ser Val Pro Leu Gln Cys Leu Pro Pro Ser Ser Leu 20 25 30

Ala Asn Lys Asp Ser His Phe Arg Ala Pro Arg Lys 35

<210> 815

<211> 116

<212> PRT

<213> Homo sapiens

<400> 815

Met Thr Pro Leu Leu Thr Leu Ile Leu Val Val Leu Met Gly Leu Pro
1 5 10 15

Leu Ala Gln Ala Leu Asp Cys His Val Cys Ala Tyr Asn Gly Asp Asn 20 25 30

Cys Phe Asn Pro Met Arg Cys Pro Ala Met Val Ala Tyr Cys Met Thr 35 40 45

Thr Arg Thr Tyr Tyr Thr Pro Thr Arg Met Lys Val Ser Lys Ser Cys 50 55 60

Val Pro Arg Cys Phe Glu Thr Val Tyr Asp Gly Tyr Ser Lys His Ala 65 70 75 80

Ser Thr Thr Ser Cys Cys Gln Tyr Asp Leu Cys Asn Gly Thr Gly Leu 85 90 95

Ala Thr Pro Ala Thr Leu Ala Leu Ala Pro Ile Leu Leu Ala Thr Leu 100 105 110

Trp Gly Leu Leu 115

<210> 816

<211> 50

<212> PRT <213> Homo sapiens <400> 816 Met Pro Gly Ile Le 1

Met Pro Gly Ile Leu Ala Gly Ile Pro Val Lys Asp Leu Cys Leu Ser

1 5 10 15

Leu Leu Gln Gly Phe Arg Leu Leu Leu Cys Val Cys Pro Gly Trp 20 25 30

Leu Ser Gly Trp Met Gly Gly Gln Lys Gly Ser Pro Arg Ile Val Asp 35 40

Ile Gly 50

<210> 817

<211> 206 <212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (143)

<223> Xaa equals any amino acid

<400> 817

Met Ala Ser His Gly Leu Cys Pro Cys Leu Leu Met Gly Thr Gly Trp 1 5 10 15

Gly Leu Trp Thr Leu Leu Pro Asp Leu Glu Val Met Ala Gly Lys Gly 20 25 30

Arg Met Pro Phe Ala Gly Ile Ser Val Thr Ser Gly Phe Leu Arg Ser 35 40 45

Leu Lys Arg Ala Pro Leu Pro His Thr Gly Ser Pro Asp Pro Arg Pro 50 55 60

Ser Gly Ile Trp Ser Gly Val Arg Thr Thr Ser Glu Glu Ala Gly Ala 65 70 75 80

Thr Ser Thr Gln Ile Ser Thr Ala Ala Pro Arg Phe His Ser Arg Arg
85 90 95

Lys Gly Pro Lys Arg Asn Leu Ala Pro Gln Leu Arg Val Leu Val His 100 105 110

Arg Thr Val Pro Pro Gly Gln Leu Val Tyr Ala Pro Gln Thr Val Asp 115 120 125

Ser Leu Arg Gly Thr Leu Leu Arg Pro Pro Ala Trp Leu Leu Xaa Gln 130 135 140

Val Pro Cys Phe Tyr Ser Gly Gln Pro Leu Leu Val Ser Ala Ser Val 145 150 155 160

Leu Cys Arg Asp Leu Met Gln Phe Leu Phe Leu Leu Lys Ser Tyr Leu 165 170 175

Leu Pro Phe Leu Glu Val Cys Arg Ile Gly Trp Glu Gln Ile Gln Arg 185 Ile Leu Gly Ala Gly Leu Trp Arg Gln Lys Glu Gly Asn Gly <210> 818 <211> 58 <212> PRT <213> Homo sapiens <400> 818 Met Trp Pro Cys Cys Leu Asp Ser Leu Leu Phe Gly Phe Trp Leu Trp Ala Gln Gly Ile Thr Leu Leu Ser Glu Asp Ser Ile Arg Ile Val Cys Ser Ser Cys Glu Pro Glu Val Leu His Val Pro Thr Pro Val Tyr Arg. 40 Pro Cys Pro Ser His Ser Pro Leu Thr Phe <210> 819 <211> 28 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any amino acid <400> 819 Met Leu Xaa Gln Phe Phe Leu Phe Val Cys Phe His Phe Ile Thr Tyr Gly Phe Leu Cys His Thr Thr Arg Asn Phe Glu Lys 20 <210> 820 <211> 42 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any amino acid

506

<220>
<221> SITE
<222> (13)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (22)

<223> Xaa equals any amino acid

<400> 820

Met Ile Leu Phe Pro Gln Xaa Ala Leu Arg Leu Gly Xaa Trp Pro Arg 1 5 10 15

Thr Trp Ser Ile Leu Xaa Lys Tyr Ser Val Asn Phe Phe Ser Ala Tyr 20 25 30

Ser Pro Met Gly Ala Val Gly Thr Glu Phe 35 40

<210> 821

<211> 75

<212> PRT

<213> Homo sapiens

<400> 821

Met Ser Arg Phe Ile Leu Asn His Leu Val Leu Ala Ile Pro Leu Arg

1 5 10 15

Val Leu Val Val Leu Trp Ala Phe Val Leu Gly Leu Ser Arg Val Met 20 25 30

Leu Gly Arg His Asn Val Thr Asp Val Ala Phe Gly Phe Phe Leu Gly 35 40 45

Tyr Met Gln Tyr Ser Ile Val Asp Tyr Cys Trp Leu Ser Pro His Asn 50 55 60

Ala Pro Val Leu Phe Leu Leu Trp Ser Gln Arg
65 70 75

<210> 822

<211> 97

<212> PRT

<213> Homo sapiens

<400> 822

Met Cys Lys Gly Leu Lys Asn Pro Glu Gly Leu Leu Leu Leu Leu Leu 1 5 10 15

Leu Leu Phe Thr Asp Thr Ser Asn Ser His Cys Leu Pro Pro Tyr
20 25 30

Leu Ser Cys Phe Leu His Glu Arg Gln Pro Glu Leu Gln Ser Val Cys 35 40

Ile Ser Ala Ala Tyr Val Leu Ala Thr Pro Pro Glu Pro Ser Phe Ile 50 55 60

Leu Val Gly Phe Ser Glu Ala Gly Phe Ala Gln Val Ala Cys Phe Leu

65 70 75 80

Lys Tyr Leu Phe Cys Arg Pro Phe Thr Arg His Gly Tyr Phe Tyr Ser 85 90 95

Gly

<210> 823

<211> 187

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (167)

<223> Xaa equals any amino acid

<400> 823

Met Gly Phe Phe Leu Val Leu Val Met Glu Gln Ile Thr Leu Ala Tyr
1 5 10 15

Lys Glu Gln Ser Gly Pro Ser Pro Leu Glu Glu Thr Arg Ala Leu Leu 20 25 30

Gly Thr Val Asn Gly Gly Pro Gln His Trp His Asp Gly Pro Gly Val
35 40 45

Pro Gln Ala Ser Gly Ala Pro Ala Thr Pro Ser Ala Leu Arg Ala Cys
50 55 60

Val Leu Val Phe Ser Leu Ala Leu His Ser Val Phe Glu Gly Leu Ala 65 70 75 80

Val Gly Leu Gln Arg Asp Arg Ala Arg Ala Met Glu Leu Cys Leu Ala 85 90 95

Leu Leu Leu His Lys Gly Ile Leu Ala Val Ser Leu Ser Leu Arg Leu 100 105 110

Leu Gln Ser His Leu Arg Ala Gln Val Val Ala Gly Cys Gly Ile Leu 115 120 125

Phe Ser Cys Met Thr Pro Leu Gly Ile Gly Leu Gly Ala Ala Leu Ala 130 135 140

Glu Ser Ala Gly Pro Leu His Gln Leu Ala Gln Ser Val Leu Glu Gly
145 150 155 160

Met Ala Ala Gly Thr Phe Xaa Tyr Ile Thr Phe Leu Glu Ile Leu Leu 165 170 175

Phe His Pro Lys Phe Lys Gly Val Ser Arg Arg 180 185

<210> 824

<211> 140

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any amino acid

<400> 824

Met Phe Leu Phe Gly Gly Phe Leu Met Thr Leu Phe Gly Leu Phe Val

1 5 10 15

Ser Leu Val Phe Leu Gly Gln Ala Phe Thr Ile Met Leu Val Tyr Val 20 25 30

Trp Ser Arg Xaa Asn Pro Tyr Val Arg Met Asn Phe Phe Gly Leu Leu 35 40 45

Asn Phe Gln Ala Pro Phe Leu Pro Trp Val Leu Met Gly Phe Ser Leu 50 60

Leu Leu Gly Asn Ser Ile Ile Val Asp Leu Leu Gly Ile Ala Val Gly 65 70 75 80

His Ile Tyr Phe Phe Leu Glu Asp Val Phe Pro Asn Gln Pro Gly Gly 85 90 95

Ile Arg Ile Leu Lys Thr Pro Ser Ile Leu Lys Ala Ile Phe Asp Thr 100 105 110

Pro Asp Glu Asp Pro Asn Tyr Asn Pro Leu Pro Glu Glu Arg Pro Gly
115 120 125

Gly Phe Ala Trp Gly Glu Gly Gln Arg Leu Gly Gly 130 135 140

<210> 825

<211> 354

<212> PRT

<213> Homo sapiens

<400> 825

Met Trp Arg Leu Trp Pro Gly Ser Pro Leu Val Pro Leu Ser Trp Leu

1 5 10 15

Trp Pro Ala Arg Ala Ala Phe Leu Ser Gly Pro Trp Thr Leu Pro Pro 20 25 30

Cys Leu Pro Asp Pro Leu Leu Ala Val Pro Lys Cys Cys Leu Thr Leu 35 40 45

Gly Ile His Leu Leu Pro Ala Trp Pro Gly Pro Pro Val Gly Gly 50 55 60

Cys Ser Gln Leu His Arg Gly Cys Cys Tyr Pro Gly Met Gly Cys Leu 65 70 75 80

Asn Arg Asp Leu Cys Pro Pro Ser Leu Val Ser Arg Arg Trp Gly Asp 85 90 95

Gln Leu Leu Trp Ser Pro Asp Gly Ser Lys Ile Leu Ala Thr Thr Pro 100 105 110

Ser Ala Val Phe Arg Val Trp Glu Ala Gln Met Trp Thr Cys Glu Arg 115 120 125

Trp Pro Thr Leu Ser Gly Arg Cys Gln Thr Gly Cys Trp Ser Pro Asp 130 135 140

Gly Ser Arg Leu Leu Phe Thr Val Leu Gly Glu Pro Leu Ile Tyr Ser 145 150 155 160

Leu Ser Phe Pro Glu Arg Cys Gly Glu Gly Lys Gly Cys Val Gly Gly 165 170 175

Ala Lys Ser Ala Thr Ile Val Ala Asp Leu Ser Glu Thr Thr Ile Gln
180 185 190

Thr Pro Asp Gly Glu Glu Arg Leu Gly Gly Glu Ala His Ser Met Val 195 200 205

Trp Asp Pro Ser Gly Glu Arg Leu Ala Val Leu Met Lys Gly Lys Pro 210 215 220

Arg Val Gln Asp Gly Lys Pro Val Ile Leu Leu Phe Arg Thr Arg Asn 225 230 235 240

Ser Pro Val Phe Glu Leu Leu Pro Cys Gly Ile Ile Gln Gly Glu Pro 245 250 255

Gly Ala Gln Pro Gln Leu Ile Thr Phe His Leu Pro Ser Thr Lys Gly 260 265 270

Pro Cys Ser Val Trp Ala Gly Pro Gln Ala Glu Leu Pro Thr Ser Arg 275 280 285

Cys Thr Leu Ser Met Pro Ser Phe His Val Leu Ala Gln Cys Leu Gly 290 295 300

Gly Pro Arg Asn Pro Leu Leu Gly Val Glu Ala Leu Phe Met Thr Cys 305 310 315 320

Pro Ser Leu Leu Arg His Pro Gln Pro Leu Pro Leu Gly Thr Leu Ser 325 330 335

Gln Gly His His Leu Phe Cys Pro Thr Pro His Ile Pro Thr Ser Lys 340 345 350

Asn Lys

<210> 826

<211> 338

<212> PRT

<213> Homo sapiens

<400> 826

Met Arg Lys Pro Ala Ala Gly Phe Leu Pro Ser Leu Leu Lys Val Leu

1				5					10					15	
Leu	Leu •	Pro	Leu 20	Ala	Pro	Ala	Ala	Ala 25	Gln	Asp	Ser	Thr	Gln 30	Ala	Ser
Thr	Pro	Gly 35	Ser	Pro	Leu	Ser	Pro 40	Thr	Glu	Tyr	Glu	Arg 45	Phe	Phe	Ala
Leu	Leu 50	Thr	Pro	Thr	Trp	Lys 55	Ala	Glu	Thr	Thr	Cys 60	Arg	Leu	Arg	Ala
Thr 65	His	Gly	Суѕ	Arg	Asn 70	Pro	Thr	Leu	Val	Gln 75	Leu	Asp	Gln	Tyr	Glu 80
Asn	His	Gly	Leu	Val 85	Pro	Asp	Gly	Ala	Val 90	Суѕ	Ser	Asn	Leu	Pro 95	Tyr
Ala	Ser	Trp	Phe 100	Glu	Ser	Phe	Cys	Gln 105	Phe	Thr	His	Tyr	Arg 110	Cys	Ser
		115	_	-	Ala	-	120					125			
	130				Thr	135					140				
145					Thr 150					155					160
	_			165	Gln		_		170					175	
			180		Ser			185					190		
		195			Glu		200					205			
	210				Glu	215	_		_		220				
225					Gly 230					235					240
				245	Ser				250					255	
			260		Ser			265					270		
		275			Thr		280					285			
Ile	Arg 290	Ser	Ala	Gln	Glu	Ile 295	Asp	Glu	Met	Asn	Glu 300	Ile	Tyr	Asp	Glu
305					Asn 310					315					320
His	Thr	Glu	Pro	Cys 325	Trp	Cys	Cys	Ala	11e 330	Arg	Ser	Trp	Arg	Ile 335	Pro

Ala Ser

<210> 827

<211> 58

<212> PRT

<213> Homo sapiens

<400> 827

Gly Pro His Gly Lys Glu Leu Leu Asn Ser Phe Leu Tyr Glu Leu Pro  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Leu Cys Ser Tyr Lys Gly Pro Phe Leu Ser

<210> 828

<211> 46

<212> PRT

<213> Homo sapiens

<400> 828

Met Thr Leu Ser Leu Gln Leu Ala Glu Leu Val His Phe Val Cys Ala 1 5 10 15

Phe Gln Ser Gln Trp Thr Gly Val Tyr Pro Met Met Pro Pro Leu Lys 20 25 30

Pro Thr Glu Pro Leu Cys Phe Ala Cys Val Pro Cys Arg Val
35 40 45

<210> 829

<211> 222

<212> PRT

<213> Homo sapiens

<400> 829

Met Tyr Leu Ser Ile Ile Phe Leu Ala Phe Val Ser Ile Asp Arg Cys
1 5 10 15

Leu Gln Leu Thr His Ser Cys Lys Ile Tyr Arg Ile Gln Glu Pro Gly
20 25 30

Phe Ala Lys Met Ile Ser Thr Val Val Trp Leu Met Val Leu Leu Ile 35 40 45

Met Val Pro Asn Met Met Ile Pro Ile Lys Asp Ile Lys Glu Lys Ser 50 60

Asn Val Gly Cys Met Glu Phe Lys Lys Glu Phe Gly Arg Asn Trp His 65 70 75 80

Leu Leu Thr Asn Phe Ile Cys Val Ala Ile Phe Leu Asn Phe Ser Ala 85 90 95

Ile Ile Leu Ile Ser Asn Cys Leu Val Ile Arg Gln Leu Tyr Arg Asn 100 105 110

Lys Asp Asn Glu Asn Tyr Pro Asn Val Lys Lys Ala Leu Ile Asn Ile 115 120 125

Leu Leu Val Thr Thr Gly Tyr Ile Ile Cys Phe Val Pro Tyr His Ile 130 135 140

Val Arg Ile Pro Tyr Thr Leu Ser Gln Thr Glu Val Ile Thr Asp Cys 145 150 155 160

Ser Thr Arg Ile Ser Leu Phe Lys Ala Lys Glu Ala Thr Leu Leu Leu 165 170 175

Ala Val Ser Asn Leu Cys Phe Asp Pro Ile Leu Tyr Tyr His Leu Ser 180 185 190

Lys Ala Phe Arg Ser Lys Val Thr Glu Thr Phe Ala Ser Pro Lys Glu
195 200 205

Thr Lys Ala Gln Lys Glu Lys Leu Arg Cys Glu Asn Asn Ala 210 215 220

<210> 830

<211> 152

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (66)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (77)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (81)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (84)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (86)

<223> Xaa equals any amino acid

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<220>
<221> SITE
<222> (87)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (93)
<223> Xaa equals any amino acid
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<221> SITE
<222> (103)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (110)
<223> Xaa equals any amino acid
<400> 830
Met Asp His Ser Pro Thr Thr Gly Val Val Thr Val Ile Val Ile Leu
Ile Ala Ile Ala Ala Leu Gly Ala Phe Asp Pro Gly Leu Leu Val Leu
Pro Ala Ala Ala His Gln Pro Val Arg Gly Arg Gly Glu His Arg
Gly Gly Trp Gly Asp Gln Gly Thr Leu Pro Ala Gly Ala Val Phe Gly
Gln Xaa Thr Val Arg Gly Glu Lys Gly Gln Ala Asp Xaa Ser Gln Thr
Xaa Arg Lys Xaa Thr Xaa Xaa Pro Gly Cys Lys Gly Xaa Leu Val Pro
                 85
Val Cys Lys Pro Ala Lys Xaa Gly Leu Gly Gly Ala Lys Xaa Ile Arg
                                105
Met Arg Cys Cys Leu Arg Gly Arg Ala Asp Thr Cys Trp His Gly Leu
Cys Gly Phe Arg Pro Ser His Ala Leu Met Pro Gly Asp Leu Ala Val
                        135
                                            140
Leu Gly Phe Pro Ser Ala Ser Arg
145
<210> 831
<211> 713
<212> PRT
<213> Homo sapiens
<400> 831
Met Leu Leu Ala Thr Leu Leu Leu Leu Leu Gly Gly Ala Leu Ala
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1				5					10					15	
His	Pro	Asp	Arg 20	Ile	Ile	Phe	Pro	Asn 25	His	Ala	Суѕ	Glu	Asp 30	Pro	Pro
Ala	Val	Leu 35	Leu	Glu	Val	Gln	Gly 40	Thr	Leu	Gln	Arg	Pro 45	Leu	Val	Arg
Asp	Ser 50	Arg	Thr	Ser	Pro	Ala 55	Asn	Cys	Thr	Trp	Leu 60	Ile	Leu	Gly	Ser
Lys 65	Glu	Gln	Thr	Val	Thr 70	Ile	Arg	Phe	Gln	Lys 75	Leu	His	Leu	Ala	Cys 80
Gly	Ser	Glu	Arg	Leu 85	Thr	Leu	Arg	Ser	Pro 90	Leu	Gln	Pro	Leu	Ile 95	Ser
Leu	Суѕ	Glu	Ala 100	Pro	Pro	Ser	Pro	Leu 105	Gln	Leu	Pro	Gly	Gly 110	Asn	Val
Thr	Ile	Thr 115	Tyr	Ser	Tyr	Ala	Gly 120	Ala	Arg	Ala	Pro	Met 125	Gly	Gln	Gly
	130					135					140			Glu	
145					150					155	`			Cys	160
				165					170					Ser 175	
Asp	Pro	Phe	Pro 180	Gly	Leu	Thr	Pro	Arg 185	Pro	Val	Pro	Ser	Leu 190	Pro	Cys
		195					200					205		Gly	
	210					215					220			Leu	
225					230					235				Leu	240
				245					250					Pro 255	
			260					265					270	Gly	
Ala	Val	Thr 275	Val	Glu	Thr	Leu	Ser 280	Gly	Gln	Ala	Val	Val 285	Ser	Tyr	His
Thr	Val 290	Ala	Trp	Ser	Asn	Gly 295	Arg	Gly	Phe	Asn	Ala 300	Thr	Tyr	His	Val
Arg 305	Gly	Tyr	Cys	Leu	Pro 310	Trp	Asp	Arg	Pro	Cys 315	Gly	Leu	Gly	Ser	Gly 320
Leu	Gly	Ala	Gly	Glu 325	Gly	Leu	Gly	Glu	Arg 330	Cys	Tyr	Ser	Glu	Ala 335	Gln

Arg	Суѕ	Asp	Gly 340	Ser	Trp	Asp	Cys	Ala 345	Asp	Gly	Thr	Asp	Glu 350	Glu	Asp
Суз	Pro	Gly 355	Cys	Pro	Pro	Gly	His 360	Phe	Pro	Cys	Gly	Ala 365	Ala	Gly	Thr
Ser	Gly 370	Ala	Thr	Ala	Суѕ	Tyr 375	Leu	Pro	Ala	Asp	Arg 380	Cys	Asn	Tyr	Gln
Thr 385	Phe	Cys	Ala	Asp	Gly 390	Ala	Asp	Glu	Arg	Arg 395	Cys	Arg	His	Cys	Gln 400
Pro	Gly	Asn	Phe	Arg 405	Cys	Arg	Asp	Glu	Lys 410	Cys	Val	Tyr	Glu	Thr 415	Trp
Val	Cys	Asp	Gly 420	Gln	Pro	Asp	Суѕ	Ala 425	Asp	Gly	Ser	Asp	Glu 430	Trp	Asp
Cys	Ser	Tyr 435	Val	Leu	Pro	Arg	Lys 440	Val	Ile	Thr	Ala	Ala 445	Val	Ile	Gly
Ser	Leu 450	Val	Cys	Gly	Leu	Leu 455	Leu	Val	Ile	Ala	Leu 460	Gly	Cys	Thr	Cys
Lys 465	Leu	Туr	Ala	Ile	Arg 470	Thr	Gln	Glu	Tyr	Ser 475	Ile	Phe	Ala	Pro	Leu 480
Ser	Arg	Met	Glu	Ala 485	Glu	Ile	Val	Gln	Gln 490	Gln	Ala	Pro	Pro	Ser 495	Tyr
Gly	Gln	Leu	Ile 500	Ala	Gln	Gly	Ala	Ile 505	Pro	Pro	Va <u>l</u>	Glu	Asp 510	Phe	Pro
Thr	Glu	Asn 515	Pro	Asn	Asp	Asn	Ser 520	Val	Leu	Gly	Asn	Leu 525	Arg	Ser	Leu
Leu	Gln 530	Ile	Leu	Arg	Gln	Asp 535	Met	Thr	Pro	Gly	Gly 540	Gly	Pro	Gly	Ala
Arg 545	Arg	Arg	Gln	Arg	Gly 550	Arg	Leu	Met	Arg	Arg 555	Leu	Val	Arg	Arg	Leu 560
Arg	Arg	Trp	Gly	Leu 565	Leu	Pro	Arg	Thr	Asn 570		Pro	Ala	Arg	Ala 575	Ser
Glu	Ala	Arg	Ser 580	Gln	Val	Thr	Pro	Ser 585	Ala	Ala	Pro	Leu	Glu 590	Ala	Leu
Asp	Gly	Gly 595	Thr	Gly	Pro	Ala	Arg 600	Glu	Gly	Gly	Ala	Val 605	Gly	Gly	Gln
Asp	Gly 610	Glu	Gln	Ala	Pro	Pro 615	Leu	Pro	Ile	Lys	Ala 620	Pro	Leu	Pro	Ser
Ala 625	Ser	Thr	Ser	Pro	Ala 630	Pro	Thr	Thr	Val	Pro 635	Glu	Ala	Pro	Gly	Pro 640
Leu	Pro	Ser	Leu	Pro 645	Leu	Glu	Pro	Ser	Leu 650		Ser	Gly	Val	Val 655	Gln

Ala Leu Arg Gly Arg Leu Leu Pro Ser Leu Gly Pro Pro Gly Pro Thr 660 665 670

Arg Ser Pro Pro Gly Pro His Thr Ala Val Leu Ala Leu Glu Asp Glu 675 680 685

Asp Asp Val Leu Leu Val Pro Leu Ala Glu Pro Gly Val Trp Val Ala 690 695 700

Glu Ala Glu Asp Glu Pro Leu Leu Thr 705 710

<210> 832

<211> 340

<212> PRT

<213> Homo sapiens

<400> 832

Met Ala Leu Arg Leu Leu Arg Arg Ala Ala Arg Gly Ala Ala Ala 1 5 10 15

Ala Leu Leu Arg Leu Lys Ala Ser Leu Ala Ala Asp Ile Pro Arg Leu 20 25 30

Gly Tyr Ser Ser Ser His His Lys Tyr Ile Pro Arg Arg Ala Val 35 40 45

Leu Tyr Val Pro Gly Asn Asp Glu Lys Lys Ile Lys Lys Ile Pro Ser 50 60

Leu Asn Val Asp Cys Ala Val Leu Asp Cys Glu Asp Gly Val Ala Ala 65 70 75 80

Asn Lys Lys Asn Glu Ala Arg Leu Arg Ile Val Lys Thr Leu Glu Asp 85 90 95

Ile Asp Leu Gly Pro Thr Glu Lys Cys Val Arg Val Asn Ser Val Ser 100 105 110

Ser Gly Leu Ala Glu Glu Asp Leu Glu Thr Leu Leu Gln Ser Arg Val 115 120 125

Leu Pro Ser Ser Leu Met Leu Pro Lys Val Glu Ser Pro Glu Glu Ile 130  $$135\$ 

Gln Trp Phe Ala Asp Lys Phe Ser Phe His Leu Lys Gly Arg Lys Leu 145 150 155 160

Glu Gln Pro Met Asn Leu Ile Pro Phe Val Glu Thr Ala Met Gly Leu 165 170 175

Leu Asn Phe Lys Ala Val Cys Glu Glu Thr Leu Lys Val Gly Pro Gln 180 185 190

Val Gly Leu Phe Leu Asp Ala Val Val Phe Gly Gly Glu Asp Phe Arg 195 200 205

Ala Ser Ile Gly Ala Thr Ser Ser Lys Glu Thr Leu Asp Ile Leu Tyr 210 215 220

Ala Arg Gln Lys Ile Val Val Ile Ala Lys Ala Phe Gly Leu Gln Ala 225 230 235 240

Val Asp Leu Val Tyr Ile Asp Phe Arg Asp Gly Ala Gly Leu Leu Arg 245 250 255

Gln Ser Arg Glu Gly Ala Ala Met Gly Phe Thr Gly Lys Gln Val Ile 260 265 270

His Pro Asn Gln Ile Ala Val Val Gln Glu Gln Phe Ser Pro Ser Pro 275 280 285

Glu Lys Ile Lys Trp Ala Glu Glu Leu Ile Ala Ala Phe Lys Glu His 290 295 300

Gln Gln Leu Gly Lys Gly Ala Phe Thr Phe Gln Gly Ser Met Ile Asp 305 310 315 320

Met Pro Leu Leu Lys Gln Ala Gln Asn Thr Val Thr Leu Ala Thr Ser 325 330 335

Ile Lys Glu Lys

<210> 833

<211> 64

<212> PRT

<213> Homo sapiens

<400> 833

Met Val Arg His Ile Arg Glu Arg Arg Gln Pro Leu Ala Phe Gln
1 5 10 15

Arg Val Leu Leu Ser Leu Cys Leu Leu Glu Gly Ile Trp His Ser Pro  $20 \\ 25 \\ 30$ 

Ala Ala Ala Gly Gly Gly Ser His Cys Ser Ser Trp Pro Ser Leu
35 40 45

Tyr Thr Thr Phe Gln Arg Val Ser Leu Leu Glu Leu Asp Leu Gly Leu 50 55 60

<210> 834

<211> 44

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any amino acid

<400> 834

Met Cys Leu Pro Leu Leu His Cys Thr Gly Ala Leu Trp Gly Lys Xaa 1 5 10 15

Val Leu Leu Phe Leu Tyr Cys Leu Ala Gln Ser Phe Ala Tyr Ser Arg 20 25 30

His Gln Thr Val Gly Leu Val Val His Asp Tyr Trp
35 40

<210> 835

<211> 82

<212> PRT

<213> Homo sapiens

<400> 835

Met Lys Lys Val Ala Arg Leu Ser Ser Leu Gly His Val Val Trp Arg 1 5 10 15

Leu Tyr Ala Arg Val Leu Ala Leu Ile Thr Cys Ile Phe Trp Val Leu 20 25 30

Ala Leu Ile Ile Cys Ile Phe Thr Pro Gln Ile Phe Phe Lys His Leu 35 40 45

Leu His Ala Arg Pro Cys Ser Arg Tyr Arg Arg Tyr Asn Ser Lys Asn 50 55 60

Thr Asp Leu Ala Leu Met Lys Leu Lys Leu Leu Arg Gln Ala Asp Ser 65 70 75 80

Asp Lys

<210> 836

<211> 54

<212> PRT

<213> Homo sapiens

<400> 836

Met Tyr Arg Phe Phe Leu Cys Val Asp Leu Ser Phe Gln Leu Leu Trp 1 5 10 15

Val Ile Pro Arg Ser Thr Val Thr Gly Thr Tyr Gly Lys Asp Ile Phe 20 25 30

Ser Leu Ala Gly Asn His His Thr Val Phe Gln Ser Ser Cys Thr Ile 35 40 45

Leu His Thr His Gln His 50

<210> 837

<211> 221

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (184) <223> Xaa equals any amino acid <400> 837 Met Ala Gly Gly Val Arg Pro Leu Arg Gly Leu Arg Ala Leu Cys Arg 10 Val Leu Leu Phe Leu Ser Gln Phe Cys Ile Leu Ser Gly Gly Glu Ser Thr Glu Ile Pro Pro Tyr Val Met Lys Cys Pro Ser Asn Gly Leu Cys Ser Arg Leu Pro Ala Asp Cys Ile Asp Cys Thr Thr Asn Phe Ser Cys Thr Tyr Gly Lys Pro Val Thr Phe Asp Cys Ala Val Lys Pro Ser Val Thr Cys Val Asp Gln Asp Phe Lys Ser Gln Lys Asn Phe Ile Ile Asn Met Thr Cys Arg Phe Cys Trp Gln Leu Pro Glu Thr Asp Tyr Glu Cys Thr Asn Ser Thr Ser Cys Met Thr Val Ser Cys Pro Arg Gln Arg Tyr 120 Pro Ala Asn Cys Thr Val Arg Asp His Val His Cys Leu Gly Asn Arg Thr Phe Pro Lys Met Leu Tyr Cys Asn Trp Thr Gly Gly Tyr Lys Trp 155 Ser Thr Ala Leu Ala Leu Ser Ile Thr Leu Gly Gly Phe Gly Ala Asp Arg Phe Tyr Leu Gly Gln Trp Xaa Glu Gly Leu Gly Lys Leu Phe Ser 185 Phe Gly Gly Leu Gly Ile Trp Thr Leu Ile Asp Val Leu Leu Ile Gly

<210> 838

<211> 39

<212> PRT

<213> Homo sapiens

<400> 838

Met Trp Leu Thr Gln Pro Glu Ser Leu Ser Leu Cys Val Ser Val Ser 1 5 10 15

Val Gly Tyr Val Gly Pro Ala Asp Gly Ser Leu Tyr Ile 210 215 220

Gln Asp Trp Ala His Ile Leu Ala Leu Ser Ile Thr Met Leu Trp Asp

20 25 30

Phe Arg Glu Phe Pro His Leu 35

<210> 839

<211> 62

<212> PRT

<213> Homo sapiens

<400> 839

Met Glu Asn Val Cys Gln Ala Gly Phe Pro Ser Leu Leu His Leu Asn 1 5 10 15

Ile Thr Leu Thr Leu Leu Gly Leu Ala Gln Cys Tyr Leu Ala Asn Phe 20 25 30

Ser Ser Cys Arg Glu Gly Ser Glu His Tyr Leu Phe Phe Phe Phe A5 40

Leu Leu Glu Pro Gly Leu His Lys Ala Met Ala Lys Phe Ser 50 60

<210> 840

<211> 97

<212> PRT

<213> Homo sapiens

<400> 840

Met Ile Leu Leu Ser Leu Phe Gln Gly Val Arg Gly Ser Leu Gly
1 5 10 15

Ser Pro Gly Asn Arg Glu Asn Lys Glu Lys Lys Val Phe Ile Ser Leu 20 25 30

Val Gly Ser Arg Gly Leu Gly Cys Ser Ile Ser Ser Gly Pro Ile Gln 35 40 45

Lys Pro Gly Ile Phe Ile Ser His Val Lys Pro Gly Ser Leu Ser Ala 50 55 60

Glu Val Gly Leu Glu Ile Gly Asp Gln Ile Val Glu Val Asn Gly Val 65 70 75 80

Asp Phe Ser Asn Leu Asp His Lys Glu Leu Gln Leu Ala Gly Ser Cys
85 90 95

Ser

<210> 841

<211> 49

<212> PRT

<213> Homo sapiens

<400> 841 Met Asn Val Phe Val Gly Pro Leu Ser Val Ala Ile Val Ile Phe Cys Trp Ile Thr Met Tyr Trp Val Ser Ile Val Met Gly Gln Gly Arg Gly Gln Tyr Thr Trp Arg Thr Ile Leu Ser Thr Ser Thr Pro Ser Val Cys Ser <210> 842 <211> 50 <212> PRT <213> Homo sapiens <400> 842 Met Val Cys Cys Gly Phe Phe Leu Leu Trp Ser Arg Val Arg Ser Tyr Met Lys Leu Ser Gly His Arg Trp Ser Ser Ser Cys Pro His His Cys Tyr Ser Lys Cys Gly Leu His Thr Ser Asn Gly Lys Ser Ser Val His Thr Val 50 <210> 843 <211> 406 <212> PRT <213> Homo sapiens Met His Pro Ala Val Phe Leu Ser Leu Pro Asp Leu Arg Cys Ser Leu Leu Leu Val Thr Trp Val Phe Thr Pro Val Thr Thr Glu Ile Thr Ser Leu Asp Thr Glu Asn Ile Asp Glu Ile Leu Asn Asn Ala Asp Val Ala Leu Val Asn Phe Tyr Ala Asp Trp Cys Arg Phe Ser Gln Met Leu 55 His Pro Ile Phe Glu Glu Ala Ser Asp Val Ile Lys Glu Glu Phe Pro Asn Glu Asn Gln Val Val Phe Ala Arg Val Asp Cys Asp Gln His Ser

Asp Ile Ala Gln Arg Tyr Arg Ile Ser Lys Tyr Pro Thr Leu Lys Leu

105

100

Phe Arg Asn Gly Met Met Lys Arg Glu Tyr Arg Gly Gln Arg Ser 120 Val Lys Ala Leu Ala Asp Tyr Ile Arg Gln Gln Lys Ser Asp Pro Ile 135 140 Gln Glu Ile Arg Asp Leu Ala Glu Ile Thr Thr Leu Asp Arg Ser Lys Arg Asn Ile Ile Gly Tyr Phe Glu Gln Lys Asp Ser Asp Asn Tyr Arg 170 Val Phe Glu Arg Val Ala Asn Ile Leu His Asp Asp Cys Ala Phe Leu

185

Ser Ala Phe Gly Asp Val Ser Lys Pro Glu Arg Tyr Ser Gly Asp Asn 200

Ile Ile Tyr Lys Pro Pro Gly His Ser Ala Pro Asp Met Val Tyr Leu 215

Gly Ala Met Thr Asn Phe Asp Val Thr Tyr Asn Trp Ile Gln Asp Lys

Cys Val Pro Leu Val Arg Glu Ile Thr Phe Glu Asn Gly Glu Glu Leu

Thr Glu Glu Gly Leu Pro Phe Leu Ile Leu Phe His Met Lys Glu Asp 260 265

Thr Glu Ser Leu Glu Ile Phe Gln Asn Glu Val Ala Arg Gln Leu Ile

Ser Glu Lys Gly Thr Ile Asn Phe Leu His Ala Asp Cys Asp Lys Phe 295

Arg His Pro Leu Leu His Ile Gln Lys Thr Pro Ala Asp Cys Pro Val

Ile Ala Ile Asp Ser Phe Arg His Met Tyr Val Phe Gly Asp Phe Lys 330

Asp Val Leu Ile Pro Gly Lys Leu Lys Gln Phe Val Phe Asp Leu His

Ser Gly Lys Leu His Arg Glu Phe His His Gly Pro Asp Pro Thr Asp 360

Thr Ala Pro Gly Glu Gln Ala Gln Asp Val Ala Ser Ser Pro Pro Glu

Ser Ser Phe Gln Lys Leu Ala Pro Ser Glu Tyr Arg Tyr Thr Leu Leu 395 390

Arg Asp Arg Asp Glu Leu 405

<210> 844

<211> 64

<212> PRT

<213> Homo sapiens

<400> 844

Met Val Ser Pro Leu Ile Ser Ala Leu Phe His Val Pro Phe Leu Trp
1 5 10 15

Leu Gly Met Phe Phe Pro His Ser Leu Ser Gly Pro Phe Pro Ser His 20 25 30

Leu Arg Arg Ala Ser Ser Ser Arg Lys Pro Leu Val Lys Pro Pro Arg 35 40 45

Ala Arg Gln Tyr Pro Pro Leu Ala Ser Ser Gly Tyr Arg Gly Arg Ile 50 55 60

<210> 845

<211> 62

<212> PRT

<213> Homo sapiens

<400> 845

Met Lys Asn Ser Thr Ser Leu Leu Tyr Lys Leu Phe Ser Ser Leu Ser 1 5 10 15

Val Phe Ile Phe Lys Phe Leu Leu Phe Tyr Thr Leu His Ile Ala 20 25 30

Leu Gly Val Lys Ile Gln Tyr Lys Pro Leu Ala His Phe Ile Asp His 35 40 45

Ser Cys Ile Gln Gln Val Ser Gln Val Gln Trp Ser Ile Pro 50 55 60

<210> 846

<211> 37

<212> PRT

<213> Homo sapiens

<400> 846

Met Ser Ser Phe Thr Leu Gly Leu Leu Phe Leu Phe Ile Phe Thr Thr

Ala Glu Asn Tyr Leu Ile Leu Phe Gln Arg Lys Tyr Cys Leu Val Ile 20 25 30

Phe Trp Gly Glu Phe 35

<210> 847

<211> 103

<212> PRT

<213> Homo sapiens

<400> 847

Met Ala Phe Leu Leu Glu Arg Ser Gly Thr Leu Leu Ile Cys Ser Met

1 10 15

Trp Trp His His Gly Tyr Ser Asn Ile Thr Gly Thr Glu Gly Glu Arg
20 25 30

Arg Asn Leu Lys Arg Asn Lys Thr Asn Phe Arg Arg Phe Gln Asp Gly 35 40 45

Arg Ile Gly Thr Ala Pro Val Tyr Ser Ser Gln Cys Glu Arg Cys Arg
50 60

Arg Trp Val Ile Ser Ala Phe Pro Thr Glu Gln Thr Ala His Gln Lys
65 70 75 80

Ile Ile Ser His Ala Trp Leu Gly Gly Ser His Ala His Gly Ala Ser 85 90 95

Leu Ile Ala Ser Thr Ala Val 100

<210> 848

<211> 73

<212> PRT

<213> Homo sapiens

<400> 848

Met His Ala Tyr Ala Cys Val Cys Ala Cys Met Leu Val Cys Val Cys

1 5 10 15

Val Cys Val Cys Arg Ala Leu Val Ile Pro Thr Glu Gln Arg His Arg 20 25 30

Arg Val Ala His Gly Arg Thr Ser Asp Ser Thr Leu Pro Cys Thr Val 35 40 45

Lys Ile Trp Pro Ser Glu Arg Gly Asp Gly Arg Gly Glu Arg Gly Glu
50 60

Arg Arg Gly Thr Asp Trp Arg Gly
65 70

<210> 849

<211> 84

<212> PRT

<213> Homo sapiens

<400> 849

Met Val Trp Cys Gln Cys Leu Cys Pro Leu Cys Ala Cys Trp Glu Glu 1 5 10 15

Ala Gln Ala Leu Trp Trp Pro Pro Leu Cys Thr Trp Pro Gly Glu Ala
20 25 30

Arg Gly Ser Gly Ala Ser Leu Arg Leu Arg Pro Pro Leu Gln Asn Lys 35 40 45

Leu Ser Pro Gly Val Cys Leu Ser Leu Phe Leu Ser Pro Glu Arg Asn 50 55 60

Ala Gly Val Pro Glu Ala Ser Leu Gln Thr Lys His Pro Cys Thr Ser 65 70 75 80

Tyr Gly Ser Gly

<210> 850

<211> 139

<212> PRT

<213> Homo sapiens

<400> 850

Met Ala Leu Gly Ile Gln Lys Arg Phe Ser Pro Glu Val Leu Gly Leu 1 5 10 15

Cys Ala Ser Thr Ala Leu Val Trp Val Val Met Glu Val Leu Ala Leu 20 25 30

Leu Leu Gly Leu Tyr Leu Ala Thr Val Arg Ser Asp Leu Ser Thr Phe
35 40 45

His Leu Leu Ala Tyr Ser Gly Tyr Lys Tyr Val Gly Met Ile Leu Ser 50 55 60

Val Leu Thr Gly Leu Leu Phe Gly Ser Asp Gly Tyr Tyr Val Ala Leu 65 70 75 80

Ala Trp Thr Ser Ser Ala Leu Met Tyr Phe Ile Val Arg Ser Leu Arg 85 90 95

Thr Ala Ala Leu Gly Pro Asp Ser Met Gly Gly Pro Val Pro Arg Gln
.100 105 110

Arg Leu Gln Leu Tyr Leu Thr Leu Gly Ala Ala Ala Phe Gln Pro Leu 115 120 125

Ile Ile Tyr Trp Leu Thr Phe His Leu Val Arg 130 135

<210> 851

<211> 42

<212> PRT

<213> Homo sapiens

<400> 851

Met Arg Lys Glu Glu Gly Ile Ala His Leu Ser Ile Ala Phe Phe Val

Gln Val Leu Cys Leu Tyr Gln Leu Leu Pro Val Ile Leu Pro Gln Phe 20 25 30

Asn Leu Gly Ser Gly Lys Asn Met Asn Arg 35 40

<210> 852 <211> 121 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (30) <223> Xaa equals any amino acid <220> <221> SITE <222> (32) <223> Xaa equals any amino acid <220> <221> SITE <222> (87) <223> Xaa equals any amino acid <220> <221> SITE <222> (101) <223> Xaa equals any amino acid <220> <221> SITE <222> (115) <223> Xaa equals any amino acid <400> 852 Met Cys Ser His Ser Thr Leu Ile His Leu Tyr Leu Val Leu Pro Phe 10 Phe Phe Leu Phe Leu Pro Ser Ser Phe Pro Phe Pro Ser Xaa Ser Xaa Ser Ser Ile Leu Pro Ser Leu Arg Leu Pro Pro Phe Phe Pro Pro Ser 40 Leu Phe Leu His Ser Ser Leu Pro Pro Ser Leu Ser His Pro Leu Gly Leu Ser Ile Thr Ser Ser Arg Gln Ser Phe Leu Asp Tyr His His Leu 75 Cys Thr Lys His Leu Ser Xaa Thr Leu Cys Gly Leu Ile Tyr His Cys Leu Asn Ile Phe Xaa Thr Arg Ala Val Met Trp His Met Gln Val Ser

Phe Leu Xaa Ile His Trp Leu Leu Pro

115

<210> 853

<211> 30 <212> PRT

<213> Homo sapiens

<400> 853

Met Phe Ala Phe Val Ile Leu Val Phe Ile Thr Ser Met Trp Ala Gln
1 5 10 15

Thr Ile Ser Leu His Val Ser Ser Ser Glu Glu Val Ser Cys
20 25 30

<210> 854

<211> 490

<212> PRT

<213> Homo sapiens

<400> 854

Met Arg Pro Ala Phe Ala Leu Cys Leu Leu Trp Gln Ala Leu Trp Pro 1 5 10 15

Gly Pro Gly Gly Glu His Pro Thr Ala Asp Arg Ala Gly Cys Ser 20 25 30

Ala Ser Gly Ala Cys Tyr Ser Leu His His Ala Thr Met Lys Arg Gln 35 40 45

Ala Ala Glu Glu Ala Cys Ile Leu Arg Gly Gly Ala Leu Ser Thr Val
50 55 60

Arg Ala Gly Ala Glu Leu Arg Ala Val Leu Ala Leu Leu Arg Ala Gly 65 70 75 80

Pro Gly Pro Gly Gly Ser Lys Asp Leu Leu Phe Trp Val Ala Leu 85 90 95

Glu Arg Arg Ser His Cys Thr Leu Glu Asn Glu Pro Leu Arg Gly
100 105 110

Phe Ser Trp Leu Ser Ser Asp Pro Gly Gly Leu Glu Ser Asp Thr Leu 115 120 125

Gln Trp Val Glu Glu Pro Gln Arg Ser Cys Thr Ala Arg Arg Cys Ala 130 135 140

Val Leu Gln Ala Thr Gly Gly Val Glu Pro Ala Gly Trp Lys Glu Met 145 150 155 160

Arg Cys His Leu Arg Ala Asn Gly Tyr Leu Cys Lys Tyr Gln Phe Glu 165 170 175

Val Leu Cys Pro Ala Pro Arg Pro Gly Ala Ala Ser Asn Leu Ser Tyr 180 185 190

Arg Ala Pro Phe Gln Leu His Ser Ala Ala Leu Asp Phe Ser Pro Pro 195 200 205

Gly Thr Glu Val Ser Ala Leu Cys Arg Gly Gln Leu Pro Ile Ser Val 210 215 220

Thr Cys Ile Ala Asp Glu Ile Gly Ala Arg Trp Asp Lys Leu Ser Gly 225 230 235 240

Asp Val Leu Cys Pro Cys Pro Gly Arg Tyr Leu Arg Ala Gly Lys Cys 245 250 255

Ala Glu Leu Pro Asn Cys Leu Asp Asp Leu Gly Gly Phe Ala Cys Glu 260 265 270

Cys Ala Thr Gly Phe Glu Leu Gly Lys Asp Gly Arg Ser Cys Val Thr 275 280 285

Ser Gly Glu Gly Gln Pro Thr Leu Gly Gly Thr Gly Val Pro Thr Arg 290 295 300

Arg Pro Pro Ala Thr Ala Thr Ser Pro Val Pro Gln Arg Thr Trp Pro 305 310 315 320

Ile Arg Val Asp Glu Lys Leu Gly Glu Thr Pro Leu Val Pro Glu Gln 325 330 335

Asp Asn Ser Val Thr Ser Ile Pro Glu Ile Pro Arg Trp Gly Ser Gln 340 345 350

Ser Thr Met Ser Thr Leu Gln Met Ser Leu Gln Ala Glu Ser Lys Ala 355 360 365

Thr Ile Thr Pro Ser Gly Ser Val Ile Ser Lys Phe Asn Ser Thr Thr 370 375 380

Ser Ser Ala Thr Pro Gln Ala Phe Asp Ser Ser Ser Ala Val Val Phe 385 390 395 400

Ile Phe Val Ser Thr Ala Val Val Leu Val Ile Leu Thr Met Thr 405 410 415

Val Leu Gly Leu Val Lys Leu Cys Phe His Glu Ser Pro Ser Ser Gln 420 425 430

Pro Arg Lys Glu Ser Met Gly Pro Pro Gly Leu Glu Ser Asp Pro Glu 435 440 445

Pro Ala Ala Leu Gly Ser Ser Ala His Cys Thr Asn Asn Gly Val 450 455 460

Lys Val Gly Asp Cys Asp Leu Arg Asp Arg Ala Glu Gly Ala Leu Leu 465 470 475 480

Ala Glu Ser Pro Leu Gly Ser Ser Asp Ala 485 490

<210> 855

<211> 71

<212> PRT

<213> Homo sapiens

<400> 855 Met Arg Ile His Phe Lys Ile Leu Val Leu Val Ile Tyr Phe Ile Leu Leu Gly Ser Phe Ser Asp Arg Cys Ser Leu Leu Asp Cys Lys Ser Arg Ile Gln Arg Ile Phe Ile Cys Asn Ile Leu Asn Leu Ser Leu Val Ser 40 Cys His Leu Cys Arg Tyr Ser Phe Asp Cys Leu Thr Arg Gly Lys Cys Phe Pro Leu Ser Phe Pro Ala 70 <210> 856 <211> 68 <212> PRT <213> Homo sapiens <400> 856 Met Leu Met Leu Leu Thr Leu Leu Val Leu Gly Met Val Trp Val Ala Ser Ala Ile Val Asp Lys Asn Lys Ala Asn Arg Glu Ser Leu Tyr Asp Phe Trp Glu Tyr Tyr Leu Pro Tyr Leu Tyr Ser Cys Ile Ser Phe Leu 40 Gly Val Leu Leu Leu Ala Ala Gly Arg Pro Gly Gly Ala Ala Val Leu Leu Ser Leu 65 <210> 857 <211> 79 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (36) <223> Xaa equals any amino acid <400> 857 Met Arg Val Phe Ala Leu Leu Pro Pro Phe His Lys Ser Thr Val Leu Ser Phe Leu Leu Phe Phe Leu Ser Phe Phe Phe Arg Gln Gly Leu 25

Ala Val Ser Xaa Arg Leu Glu Cys Ser Gly Ala Ile Ile Ala His Cys

Ser Leu Asp Leu Leu Asp Ser Ser Asn Pro Pro Ala Leu Thr Ser Gln 50 60

Leu Leu Arg Arg Pro Arg Gln Glu Asp His Leu Ser Pro Gly Gly 65 70 75

<210> 858

<211> 233

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (173)

<223> Xaa equals any amino acid

<400> 858

Met His Arg Gly Lys Leu Asp Cys Ala Gly Gly Ala Leu Leu Ser Ser 1 5 10 15

Tyr Leu Ile Val Leu Met Ile Leu Leu Ala Val Val Ile Cys Thr Val 20 25 30

Ser Ala Ile Met Cys Val Ser Met Arg Gly Thr Ile Cys Asn Pro Gly 35 40 45

Pro Arg Lys Ser Met Ser Lys Leu Leu Tyr Ile Arg Leu Ala Leu Phe 50 55 60

Phe Pro Glu Met Val Trp Ala Ser Leu Gly Ala Ala Trp Val Ala Asp 65 70 75 80

Gly Val Gln Cys Asp Arg Thr Val Val Asn Gly Ile Ile Ala Thr Val 85 90 95

Val Val Ser Trp Ile Ile Ile Ala Ala Thr Val Val Ser Ile Ile Ile 100 105 110

Val Phe Asp Pro Leu Gly Gly Lys Met Ala Pro Tyr Ser Ser Ala Gly 115 120 125

Pro Ser His Leu Asp Ser His Asp Ser Ser Gln Leu Leu Asn Gly Leu 130 135 140

Lys Thr Ala Ala Thr Ser Val Trp Glu Thr Arg Ile Lys Leu Leu Cys 145 150 155 160

Cys Cys Ile Gly Lys Asp Asp His Thr Arg Val Ala Xaa Ser Ser Thr 165 170 175

Ala Glu Leu Phe Ser Thr Tyr Phe Ser Asp Thr Asp Leu Val Pro Ser 180 185 190

Asp Ile Ala Ala Gly Leu Ala Leu Leu His Gln Gln Asp Asn Ile 195 200 205

Arg Asn Asn Gln Asp Leu Pro Arg Trp Ser Ala Met Pro Gln Gly Ala
210 215 220

Pro Arg Lys Leu Ile Trp Met Gln Asn 225 230

<210> 859

<211> 66

<212> PRT

<213> Homo sapiens

<400> 859

Met Phe Val Glu Arg Trp Leu Pro Cys Phe Leu Val Val Ala Val Val 1 5 10 15

Val Trp Val Phe Ala Cys Gly Pro Val Glu Asp Lys Glu Asp Ser Phe 20 25 30

Gly Trp Ser Ser Tyr Phe Leu Ala Ser Gly Leu Pro Pro Leu Leu Phe 35 40 45

Glu Ala Ser Gln Thr Arg Thr Val Arg Ala Gly Arg Leu Gly Val Phe 50 55 60

Val Cys 65

<210> 860

<211> 67

<212> PRT

<213> Homo sapiens

<400> 860

Met Pro Leu Glu Gly Phe Cys Leu Val Leu Asp Ile Gly Phe Leu Leu 1 5 10 15

Val Met Leu Ile Ser Leu Ala Ser Glu Cys Phe Thr Thr Cys Leu Asp 20 25 30

Ser Phe Ser Thr Thr Glu Pro Gly Cys Lys Phe Tyr Lys Leu Leu His 35 40 45

Ser Val Ser Leu Leu Asn Ile Asn Phe Asn Val Lys Ser Leu Leu Cys 50 55 60

Ser His Ile

<210> 861

<211> 33

<212> PRT <213> Homo sapiens

<220>

<221> SITE

<222> (21)

<223> Xaa equals any amino acid

<400> 861

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Met Cys Leu Leu Ala His Leu Phe Cys His His Leu Leu Ile Leu Leu
                                     10
Pro Val Ile Glu Xaa Leu Leu Cys Thr Arg His Trp Ala Arg Gly Ile
Leu
<210> 862
<211> 44
<212> PRT
<213> Homo sapiens
<400> 862
Met Thr Lys Arg Arg Lys Pro Arg Tyr Arg Phe Ile Phe Ala Leu Tyr
Ala Leu Arg Leu Val Phe Leu Phe Arg Ala Val Thr Asn Thr Asp Ala
                                 25
Ser Arg Leu Arg Ala Lys Arg Gly Glu Cys Pro Tyr
<210> 863
<211> 90
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (29)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (30)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (65)
<223> Xaa equals any amino acid
<400> 863
Met Leu Arg Cys Ser Phe Ser Ser Phe Leu Leu Cys His Thr Ile Leu
Leu Phe Leu Gly Ser Ser Ala His Leu Leu Val Glu Xaa Xaa Val Trp
Gly Leu Tyr Glu Tyr Arg Ile Gly Asp Met Val Asp Gln Lys Ala Thr
Phe Cys Val Gln Lys Gln Glu Cys Leu Phe Pro Leu Gly Ser Trp Val
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55

Xaa Arg Val Glu Gly Gly Ala Phe Ala Arg Glu Pro Pro Ser Ser Thr Gln Tyr Phe Pro Val Ser Cys Leu Tyr Gln 85 <210> 864 <211> 40 <212> PRT <213> Homo sapiens <400> 864 Met Ser Pro Phe Asn Cys Cys Pro Phe Asn Tyr Thr Leu Ile Tyr Ile Ile Leu Leu Met Leu Ile Tyr Val Tyr Ile Ser Ser Val His Ser Leu Val Asp Ser Asp Leu Leu Asn Gly 35 <210> 865 <211> 36 <212> PRT <213> Homo sapiens <400> 865 Met Gly Cys Thr Ala Leu Leu Leu Phe His Leu Cys Val Pro Cys Glu Pro Tyr Gly Thr His Glu Lys Glu Leu Val Pro Gly Leu Tyr Phe 20 25 Leu Val Tyr Arg 35 <210> 866 <211> 70 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (67) <223> Xaa equals any amino acid <400> 866 Met Val Ser Phe Val Gly Ile Cys Leu Leu Leu Gly Ser Phe Phe Ser Pro Ser Leu Gln Gly Thr Ile Trp His His Pro Ala Lys Pro Asp Gly

Ser Gly His Gly Leu Pro Ser Phe Ala Val Ile Met Gly Lys Gln Val

35 40 45

Val Pro Thr Val Tyr Trp Arg Met Pro Tyr Pro Arg Arg Gly Gly Pro 50 55 60

Gly Thr Xaa Phe Ala Leu 65 70

<210> 867

<211> 46

<212> PRT

<213> Homo sapiens

<400> 867

Met Cys Ile Pro Glu Ala Leu Gly Lys Asn Ser Leu Phe Leu Ser Ser 1 10 15

Thr Phe Leu Trp Leu Leu Ala Phe Phe Gly Leu Trp Ser His His Ser 20 25 30

Tyr Leu Glu Gly Gln His Leu Gln Ile Cys Phe Phe Thr 35 40 45

<210> 868

<211> 74

<212> PRT

<213> Homo sapiens

<400> 868

Gly Ser Ser Val Phe Asp Thr Gln Glu Val Trp Val Val Val Tyr Ser 20 25 30

Val Asn Lys Leu Leu Ala Val Gln His Cys Gln Gly Ile Ala Pro Asn 35 40 45

Val Tyr Ala Leu Ala Val Lys Lys Ser Val Cys Asn Val Ser Glu Trp 50 55 60

Ser Leu Val Ile Cys His Pro Met Pro Ile 65 70

<210> 869

<211> 53

<212> PRT

<213> Homo sapiens

<400> 869

Met Gln Pro Trp Ala Gly Leu Cys Pro Leu Leu Val Leu Trp Ile Ser 1 5 10 15

Gly His Leu His Cys Ile Ser Ala Leu Leu Gln Glu Arg Gly Val Gly 20 25 30

Val Ser Leu Ser Ser Arg Ser Asp Ala Cys Lys Ala Ala His Arg Ile 35 40 45

Gly Thr Ser Ser Ser 50

<210> 870

<211> 82

<212> PRT

<213> Homo sapiens

<400> 870

Met Ala Ile Ser Cys Trp Ala Ser Leu Thr Val Lys Ser Leu Tyr Cys
1 5 10 15

Leu Leu Gly Phe Trp Trp Glu Ala Val Ile Ser Ser Asn Glu Leu Pro 20 25 30

Leu Pro Trp Ile Cys Gln Glu Ala Asp Gly Asn Leu Ala Asn Ser Gly
35 40 45

Arg Tyr Gln Ala Pro Ser Ser Ala Pro Val Thr Leu Phe Tyr Thr Cys 50 55 60

Gly Ser Thr Thr Val Cys Ser Glu Gly Gln Ser Leu Pro Leu Leu Cys
65 70 75 80

Phe Ser

<210> 871

<211> 57

<212> PRT

<213> Homo sapiens

<400> 871

Met Pro Pro His Arg Gln Thr Asp Gly Gln Met Gly Leu Pro Ala Pro 1 5 10 15

Ala Leu Trp Val Trp Gly Leu Leu Ser Ser Ser Phe Gln Thr Leu 20 25 30

Leu Pro Ala Phe Pro Lys Pro Pro Ala Leu Asn Leu Gly Cys Ser Thr 35 40 45

Arg Pro Ile Pro Ser Phe Leu Lys Ile 50 55

<210> 872

<211> 54

<212> PRT

<213> Homo sapiens

<220>

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<221> SITE
<222> (38)
<223> Xaa equals any amino acid
Met Pro His Ile Phe Val Ser Gly Asn Phe Ser Leu Leu Ala Leu Phe
Leu Leu Ser Ala Asn Phe Ile Val Glu Val Gln Ser Trp Leu Leu Leu
             20
Leu Leu Phe Phe Ile Xaa Leu Gly Arg Ser Tyr Asn Phe Tyr Leu Leu
                             40
Cys Asp Ser Ile Ile Phe
     50
<210> 873
<211> 36
<212> PRT
<213> Homo sapiens
<400> 873
Met Ala Gly His Pro Thr Leu Ile Leu Cys Lys Trp Ala Phe His
                  5
                                     10
Leu Thr Gly Ala Ile Cys Glu Pro Tyr Leu Asn Gln Thr Leu Pro Thr
                                 25
Gln Ala Cys Leu
        35
<210> 874
<211> 81
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (44)
<223> Xaa equals any amino acid
Met Arg Met Arg Val Ala Val Ala Pro Arg Pro His Gln His Leu Val
Val Ser Val Ser Trp Ile Leu Ala Ile Leu Ile Ser Val Ser Gly Tyr
His Cys Phe His Leu Gln Phe Ser Tyr Met Val Xaa Asn Ile Phe Pro
                             40
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His Val Tyr Leu Ser Ser Ala Tyr Leu Leu Arg Pro Val Ile Cys Ser 50 55 60

Asp Leu Leu Pro Val Phe Val Cys Leu His Val Cys Leu Cys Leu Ile 65 70 75 80

Phe

<210> 875

<211> 80

<212> PRT

<213> Homo sapiens

<400> 875

Met Cys Val Val Cys Val Cys Val Trp Cys Met Cys Val Cys Gly Val
1 5 10 15

Cys Val Cys Leu Cys Val Cys Gly Val Cys Met Cys Ile Ser Leu Asn  $20 \\ 25 \\ 30 \\ .$ 

Glu Lys Leu Ala Pro Met Ile Met Glu Leu Thr Thr Pro Lys Val Cys 35 40 45

Arg Gln Gln Ala Gly Gly Pro Gly Gly Pro Val Val Trp Leu Gln Pro 50 55 60

Val Ser Glu Gly Leu Arg Thr Arg Arg Ala Gly Gly Ala Ala Ala Val 65 70 75 80

<210> 876

<211> 53

<212> PRT

<213> Homo sapiens

<400> 876

Met Ser Thr Phe Val Cys Val Cys Val Phe Cys Phe Val Leu Arg Ser

1 5 10 15

Glu Ala Arg Ala Lys Arg Lys Gln Asp Gln Arg Asn Thr Lys Arg Cys 20 25 30

Leu Leu Thr Lys Gly Gln Arg Asp Leu Ser Val Asn Gln Ser Lys Ile 35 40 45

Asn Arg Thr Ala Asn 50

<210> 877

<211> 80

<212> PRT

<213> Homo sapiens

<400> 877

Met Ala Leu Trp Val Thr Cys Ile Leu Ser Leu Cys Thr Trp Phe Ser 1 10 15

Cys Leu Tyr Gly Ala Asp Ser Leu Ala Asn Lys Cys Leu Ser Ala Gly
20 25 30

Ala Thr Arg Lys Ala Phe Pro Phe Cys Val Leu Phe Arg Asp Leu Glu 35 40 45

Val Gly Leu Gly Phe Glu Gly Phe Val Thr His Leu Ala Cys Lys Leu 50 55 60

Phe Cys Tyr Cys Glu Leu Ser Asp Ser Ala Leu Ser Leu Gly His Glu 65 70 75 80

<210> 878

<211> 40

<212> PRT

<213> Homo sapiens

<400> 878

Met Arg Leu Leu Lys Asn Val Leu Thr Gln Met Leu Ile Ile Ser Phe 1 5 10 15

Ser Thr Cys Ser Cys Leu Phe Ser Leu Phe Cys Ala Val Ile Thr Glu 20 25 30

Cys Leu Lys Leu Gly Asn Leu Tyr 35 40

<210> 879

<211> 320

<212> PRT

<213> Homo sapiens

<400> 879

Met Arg Gly Ser Val Glu Cys Thr Trp Gly Trp Gly His Cys Ala Pro 1 5 10 15

Ser Pro Leu Leu Leu Trp Thr Leu Leu Leu Phe Ala Ala Pro Phe Gly 20 25 30

Leu Leu Gly Glu Lys Thr Arg Gln Leu Leu Glu Phe Asp Ser Thr Asn  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Val Ser Asp Thr Ala Ala Lys Pro Leu Gly Arg Pro Tyr Pro Pro Tyr 50 60

Ser Leu Ala Asp Phe Ser Trp Asn Asn Ile Thr Asp Ser Leu Asp Pro 65 70 75 80

Ala Thr Leu Ser Ala Thr Phe Gln Gly His Pro Met Asn Asp Pro Thr 85 90 95

Arg Thr Phe Ala Asn Gly Ser Leu Ala Phe Arg Val Gln Ala Phe Ser 100 105 110

Arg Ser Ser Arg Pro Ala Gln Pro Pro Arg Leu Leu His Thr Ala Asp Thr Cys Gln Leu Glu Val Ala Leu Ile Gly Ala Ser Pro Arg Gly Asn 135 Arg Ser Leu Phe Gly Leu Glu Val Ala Thr Leu Gly Gln Gly Pro Asp Cys Pro Ser Met Gln Glu Gln His Ser Ile Asp Asp Glu Tyr Ala Pro 170 Ala Val Phe Gln Leu Asp Gln Leu Leu Trp Gly Ser Leu Pro Ser Gly Phe Ala Gln Trp Arg Pro Val Ala Tyr Ser Gln Lys Pro Gly Gly Arg 200 Glu Ser Ala Leu Pro Cys Gln Ala Ser Pro Leu His Pro Ala Leu Ala Tyr Ser Leu Pro Gln Ser Pro Ile Val Arg Ala Phe Phe Gly Ser Gln 230 235 Asn Asn Phe Cys Ala Phe Asn Leu Thr Phe Gly Ala Ser Thr Gly Pro Gly Tyr Trp Asp Gln His Tyr Leu Ser Trp Ser Met Leu Leu Gly Val 265 Gly Phe Pro Pro Val Asp Gly Leu Ser Pro Leu Val Leu Gly Ile Met 280

Ala Val Ala Leu Gly Ala Pro Gly Leu Met Leu Leu Gly Gly Gly Leu

Val Leu Leu His His Lys Lys Tyr Ser Glu Tyr Gln Ser Ile Asn

315

310

<210> 880 <211> 58

<212> PRT

<213> Homo sapiens

<400> 880

Met Arg Arg Met Arg Met Lys Ser Leu Ser Pro Arg Arg Ser Trp Trp 1 5 10 15

Thr Leu Trp Leu Gly Gln Gly Val Leu Gly Ala Ala Leu Lys Ala Asn
20 25 30

Thr Leu Trp Ile Ala Met Arg Arg Met Met Met Gly Gly Pro 35 40 45

Ala Asn Met Thr Ser Trp Pro Gln Arg Met 50 55

<210> 881 <211> 115 <212> PRT <213> Homo sapiens <400> 881 Met Leu Ala Leu Ser Ser Ser Phe Leu Val Leu Ser Tyr Leu Leu Thr Arg Trp Cys Gly Ser Val Gly Phe Ile Leu Ala Asn Cys Phe Asn Met 25 Gly Ile Arg Ile Thr Gln Ser Leu Cys Phe Ile His Arg Tyr Tyr Arg Arg Ala Pro Thr Gly Pro Trp Leu Ala Cys Thr Tyr Arg Gln Ser Cys Ser Gly His Leu Pro Ser Val Val Gly Leu Leu Phe Arg Arg Tyr Ser Ser Ala Val Ser Arg Ala Gly Gln Pro Asp Trp His Thr Leu Leu Trp Gly Pro Ser Val Trp Glu Gln Leu Ser Gly Gln His Ser Ser Gln Arg Pro Ser 115 <210> 882 <211> 402 <212> PRT <213> Homo sapiens <400> 882 Met Tyr Ser Gly Asn Arg Ser Gly Gly His Gly Tyr Trp Asp Gly Gly Gly Ala Ala Gly Ala Glu Gly Pro Ala Pro Ala Gly Thr Leu Ser Pro Ala Pro Leu Phe Ser Pro Gly Thr Tyr Glu Arg Leu Ala Leu Leu Leu Gly Ser Ile Gly Leu Leu Gly Val Gly Asn Asn Leu Leu Val Leu Val Leu Tyr Tyr Lys Phe Gln Arg Leu Arg Thr Pro Thr His Leu Leu Leu Val Asn Ile Ser Leu Ser Asp Leu Leu Val Ser Leu Phe Gly Val Thr Phe Thr Phe Val Ser Cys Leu Arg Asn Gly Trp Val Trp Asp Thr Val 100 105

Gly Cys Val Trp Asp Gly Phe Ser Gly Ser Leu Phe Gly Ile Val Ser 115 120 125

Ile Ala Thr Leu Thr Val Leu Ala Tyr Glu Arg Tyr Ile Arg Val Val 130 135 140

His Ala Arg Val Ile Asn Phe Ser Trp Ala Trp Arg Ala Ile Thr Tyr 145 150 . 155 160

Ile Trp Leu Tyr Ser Leu Ala Trp Ala Gly Ala Pro Leu Leu Gly Trp
165 170 175

Asn Arg Tyr Ile Leu Asp Val His Gly Leu Gly Cys Thr Val Asp Trp 180 185 190

Lys Ser Lys Asp Ala Asn Asp Ser Ser Phe Val Leu Phe Leu Phe Leu 195 200 205

Gly Cys Leu Val Val Pro Leu Gly Val Ile Ala His Cys Tyr Gly His 210 215 220

Ile Leu Tyr Ser Ile Arg Met Leu Arg Cys Val Glu Asp Leu Gln Thr 225 230 235 240

Ile Gln Val Ile Lys Ile Leu Lys Tyr Glu Lys Lys Leu Ala Lys Met
245 250 255

Cys Phe Leu Met Ile Phe Thr Phe Leu Val Cys Trp Met Pro Tyr Ile 260 265 270

Val Ile Cys Phe Leu Val Val Asn Gly His Gly His Leu Val Thr Pro 275 280 285

Thr Ile Ser Ile Val Ser Tyr Leu Phe Ala Lys Ser Asn Thr Val Tyr 290 295 300

Asn Pro Val Ile Tyr Val Phe Met Ile Arg Lys Phe Arg Arg Ser Leu 305 310 315 320

Leu Gln Leu Cys Leu Arg Leu Leu Arg Cys Gln Arg Pro Ala Lys 325 330 335

Asp Leu Pro Ala Ala Gly Ser Glu Met Gln Ile Arg Pro Ile Val Met 340 345 350

Ser Gln Lys Asp Gly Asp Arg Pro Lys Lys Lys Val Thr Phe Asn Ser 355 360 365

Ser Ser Ile Ile Phe Ile Ile Thr Ser Asp Glu Ser Leu Ser Val Asp 370 375 380

Asp Ser Asp Lys Thr Asn Gly Ser Lys Val Asp Val Ile Gln Val Arg 385 390 395 400

Pro Leu

<210> 883

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<211> 76
<212> PRT
<213> Homo sapiens
<400> 883
Met Gly Ala His Ser Phe Gly Phe Gln Leu Phe Met Ser Val Ser Val
Leu Trp Gly Arg Leu Cys Leu Tyr Gly Arg Phe Ser Val Ile Thr Phe
                       25
Ala Ser Pro Pro Thr Thr Phe Met Asp Ile Gln Cys Cys Phe Ala Leu
Gln Leu Glu Arg Arg Asp Gly Gln Leu Val Thr Leu Ser His Ile Ala
Thr Phe Ile Cys Ser Gly Lys Lys Leu Asp Arg Trp
<210> 884
<211> 41
<212> PRT
<213> Homo sapiens
<400> 884
Met Ala Val Pro Leu Phe Leu Tyr Ile Phe Thr Leu Leu Pro Leu Leu
Pro Phe Leu Leu Ser Leu Cys Phe Ser Pro Leu Thr Val Lys Arg Ser
                            25
Ser Ser Ser Glu Ser Lys Ser Ser Leu
<210> 885
<211> 20
<212> PRT
<213> Homo sapiens
<400> 885
Met Phe Ile Val Ala Leu Leu Ile Leu His Trp Ala Leu Gly Gly Thr
Val Met Ser Lys
            20
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Ile Leu Ile Leu Cys Asn Arg Thr Pro Glu Leu Ile Pro Gly Phe 20 25 30

Tyr Ile Arg 35

<210> 887

<211> 159

<212> PRT

<213> Homo sapiens

<400> 887

Gly Thr Arg Leu Pro Thr Asn Val Arg Gly Ile Met Val Trp Phe Ser 1 5 10 15

Cys Trp Leu Leu Thr Gln Ser Ile Thr Val Ile Leu Gly Ala Arg Gly 20 25 30

Arg Tyr Gly Arg Leu Cys Val Leu Gln Gly Arg His Cys Gly Leu Val
35 40 45

Asp Lys Ser Gly Ser Pro Asn Pro Phe Ser Ala Asp Val Leu Ala Val 50 55 60

- His Ser Gly Gln Val Ser His Ser Pro Glu Pro Gln Arg Leu Tyr Gln 65 70 75 80

Tyr Asp Glu Asn Lys Tyr Ser Thr Cys Leu Pro His Gly Val Val Ser 85 90 95

Ala Val Asn Glu Ile Met Tyr Met Lys His Leu Val Tyr Leu Ala Pro 100 105 110

Asn Lys Ser Ser Thr Thr Ser Ser Leu Ile Thr Asn Lys Met Glu Leu 115 120 125

Glu Gly Cys Ile Ser Leu Asn Lys Ile Leu Arg Gln Ile Leu Gly Val 130 135 140

Pro Val Phe Ile Leu Gln Leu Glu Ser Pro Pro Ser Leu Phe Gly 145 150 155

<210> 888

<211> 180

<212> PRT

<213> Homo sapiens

<400> 888

Met Val Val Leu Phe Arg Trp Val Pro Val Thr Asp Ala Tyr Trp Gln
1 5 10 15

Ile Leu Phe Ser Val Leu Lys Val Thr Arg Asn Leu Lys Glu Leu Asp 20 25 30

Leu Ser Gly Asn Ser Leu Ser His Ser Ala Val Lys Ser Leu Cys Lys 35 40 45

Thr Leu Arg Arg Pro Arg Cys Leu Leu Glu Thr Leu Arg Leu Ala Gly
50 55 60

Cys Gly Leu Thr Ala Glu Asp Cys Lys Asp Leu Ala Phe Gly Leu Arg
65 70 75 80

Ala Asn Gln Thr Leu Thr Glu Leu Asp Leu Ser Phe Asn Val Leu Thr 85 90 95

Asp Ala Gly Ala Lys His Leu Cys Gln Arg Leu Arg Gln Pro Ser Cys 100 105 110

Lys Leu Gln Arg Leu Gln Leu Val Ser Cys Gly Leu Thr Ser Asp Cys 115 120 125

Cys Gln Asp Leu Ala Ser Val Leu Ser Ala Ser Pro Ser Leu Lys Glu 130 135 140

Leu Asp Leu Gln Gln Asn Asn Leu Asp Asp Val Gly Val Arg Leu Leu 145 150 155 160

Cys Glu Gly Leu Ser Ile Leu Pro Ala Asn Ser Tyr Ala Trp Gly Trp 165 170 175

Thr Arg Gln Leu 180

<210> 889

<211> 484

<212> PRT

<213> Homo sapiens

<400> 889

Met Pro Arg His Leu Ser Gly Leu Leu Leu Leu Leu Trp Pro Leu Leu 1 5 10 15

Leu Leu Pro Pro Thr Pro Ala Ala Pro Gly Pro Leu Ala Arg Pro 20  $\phantom{-}25\phantom{+}30\phantom{+}$ 

Gly Leu Arg Arg Leu Gly Thr Arg Gly Pro Gly Gly Ser Pro Gly Arg

Arg Pro Val Ser Ala Val Pro Thr Arg Ala Pro Tyr Ser Gly Ala Gly 50 55 60

Gln Pro Gly Gly Ala Arg Gly Ala Gly Val Cys Arg Ser Arg Pro Leu 65 70 75 80

Asp Leu Val Phe Ile Ile Asp Ser Ser Arg Ser Val Arg Pro Leu Glu 85 90 95

Phe Thr Lys Val Lys Thr Phe Val Ser Gln Ile Ile Asp Thr Leu Asp 100 105 110

Ile Gly Ala Ala Asp Thr Arg Val Ala Val Val Asn Tyr Ala Ser Thr 115 120 125

Val Lys Ile Glu Phe His Leu Gln Thr His Ser Asp Lys Gln Ser Leu

130 135 140

Lys Gln Ala Val Ala Arg Ile Thr Pro Leu Ser Thr Gly Thr Met Ser

Lys Gln Ala Val Ala Arg Ile Thr Pro Leu Ser Thr Gly Thr Met Ser 145 150 155 160

Gly Leu Ala Ile Gln Thr Ala Met Asp Glu Ala Phe Thr Val Glu Ala 165 170 175

Gly Ala Arg Gly Pro Thr Ser Asn Ile Pro Lys Val Ala Ile Ile Val 180 185 190

Thr Asp Gly Arg Pro Gln Asp Gln Val Asn Glu Val Ala Ala Arg Ala 195 200 205

Arg Ala Ser Gly Ile Glu Leu Tyr Ala Val Gly Val Asp. Arg Ala Asp 210 215 220

Met Glu Ser Leu Lys Met Met Ala Ser Glu Pro Leu Asp Glu His Val 225 230 235 240

Phe Tyr Val Glu Thr Tyr Gly Val Ile Glu Lys Leu Ser Ser Arg Phe 245 250 255

Gln Glu Thr Phe Cys Ala Leu Asp Pro Cys Val Leu Gly Thr His Arg 260 265 270

Cys Gln His Val Cys Val Ser Asp Gly Glu Gly Lys His His Cys Glu 275 280 285

Cys Ser Gln Gly Tyr Ser Leu Asn Ala Asp Gln Lys Thr Cys Ser Ala 290 295 300

Ile Asp Lys Cys Ala Leu Asn Thr His Gly Cys Glu His Ile Cys Val 305 310 . 315 320

Asn Asp Arg Thr Gly Ser Tyr His Cys Glu Cys Tyr Glu Gly Tyr Thr 325 330 335

Leu Asn Gln Asp Arg Lys Thr Cys Ser Ala Gln Asp Gln Cys Ala Phe 340 345 350

Gly Thr His Gly Cys Gln His Ile Cys Val Asn Asp Arg Asp Gly Ser 355 360 365

His His Cys Glu Cys Tyr Glu Gly Tyr Thr Leu Asn Ala Asp Asn Lys 370 375 380

Thr Cys Ser Val Arg Ser Glu Cys Ala Gly Gly Ser His Gly Cys Gln 385 390 395 400

His Leu Cys Val Asp Asp Gly Pro Ala Ala Tyr His Cys Asp Cys Phe 405 410 415

Pro Gly Tyr Thr Leu Thr Glu Asp Arg Arg Thr Cys Ala Ala Ile Glu 420 425 430

Glu Ala Arg Arg Leu Val Ser Thr Glu Asp Ala Cys Gly Cys Glu Ala 435 440 445

Thr Leu Ala Phe Gln Glu Arg Ala Ser Ser Tyr Leu Gln Arg Leu Asn 450 455 460

Ala Lys Leu Asp Asp Ile Leu Gly Lys Leu Gln Ala Asp Ala Tyr Gly
465 470 475 480

Gln Ile His Arg

<210> 890

<211> 410

<212> PRT

<213> Homo sapiens

<400> 890

Met Gln Pro Pro Ser Leu Leu Leu Leu Val Leu Gly Leu Leu Ala Ala 1 5 10 15

Pro Ala Ala Ala Leu Val Arg Ile Pro Leu His Lys Phe Thr Ser Val 20 25 30

Arg Arg Thr Met Ser Glu Leu Gly Gly Pro Val Glu Asp Leu Ile Ala 35 40 45

Arg Gly Pro Ile Ser Lys Tyr Ala Gln Gly Val Pro Ser Val Ala Gly 50 55 60

Gly Pro Val Pro Glu Val Leu Arg Asn Tyr Met Asp Ala Gln Tyr Tyr 65 70 75 80

Gly Glu Ile Gly Ile Gly Thr Pro Pro Gln Cys Phe Thr Val Val Phe
85 90 95

Asp Thr Gly Ser Ser Asn Leu Trp Val Pro Ser Ile His Cys Lys Leu 100 105 110

Leu Asp Ile Ala Cys Trp Ile His His Lys Tyr Asn Ser Gly Lys Ser 115 120 125

Ser Thr Tyr Val Lys Asn Gly Thr Ser Phe Asp Ile His Tyr Gly Ser 130 135 140

Gly Ser Leu Ser Gly Tyr Leu Ser Gln Asp Thr Val Ser Val Pro Cys 145 150 155 160

Lys Ser Gly Leu Ser Ser Leu Ala Gly Val Lys Val Glu Arg Gln Thr 165 170 175

Phe Gly Glu Ala Thr Lys Gln Pro Gly Ile Thr Phe Ile Ala Ala Lys 180 185 190

Phe Asp Gly Ile Leu Gly Met Ala Tyr Pro Arg Ile Ser Val Asn Asn 195 200 205

Val Leu Pro Val Phe Asp Asn Leu Met Gln Gln Lys Leu Val Glu Lys 210 215 220

Asn Ile Phe Ser Phe Tyr Leu Asn Arg Asp Pro Gly Ala Gln Pro Gly 225 230 235 240

Gly Glu Leu Met Leu Gly Gly Thr Asp Ser Lys Tyr Tyr Lys Gly Pro

245 250 255

Leu Ser Tyr Leu Asn Val Thr Arg Lys Ala Tyr Trp Gln Val His Met 260 265 270

Glu Gln Val Asp Val Gly Ser Ser Leu Thr Leu Cys Lys Gly Gly Cys 275 280 285

Glu Ala Ile Val Asp Thr Gly Thr Ser Leu Ile Val Gly Pro Val Asp 290 295 300

Glu Val Arg Glu Leu Gln Lys Ala Ile Gly Ala Val Pro Leu Ile Gln 305 310 315 320

Gly Glu Tyr Met Ile Pro Cys Glu Lys Val Ser Thr Leu Pro Glu Val 325 330 335

Thr Leu Thr Leu Gly Gly Lys Pro Tyr Lys Leu Ser Ser Glu Asp Tyr 340 345 350

Thr Leu Lys Val Ser Gln Gly Gly Lys Ser Ile Cys Leu Ser Gly Phe 355 360 365

Met Gly Met Asp Ile Pro Pro Gly Gly Pro Leu Trp Ile Leu Gly 370 375 380

Asp Val Phe Ile Gly Arg Tyr Tyr Thr Val Phe Asp Arg Asp Gln Asn 385 390 395 400

Arg Val Gly Leu Ala Glu Ala Thr Arg Leu 405 410

<210> 891

<211> 73

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any amino acid

<400> 891

Met Leu Val Leu Phe Lys Phe Leu Pro Leu Thr Ser Ser Gly Arg Phe 1 5 10 15

Ser Ser Val Thr Leu Tyr His Arg Val His His Gln Xaa Val Phe Ser 20 25 30

Gln Glu Ala Lys Ser Phe Ser Pro Ala Ser Thr Leu Asn Leu Tyr Ile 35 40 45

Cys Ser Ser Gln Phe Gln Ser Leu Gln Lys Leu Tyr Cys Gly Val Ile 50 55 60

Pro Val Leu Arg Tyr Ala Ser Ile Glu 65 70

<210> 892 <211> 129 <212> PRT <213> Homo sapiens <400> 892 Met Ala Pro Ser Gly

Met Ala Pro Ser Gly Pro Leu Leu Leu Val Leu Leu Val Pro Leu Ala
1 5 10 15

Ala Ala Arg Ala Gly Pro Tyr Phe Arg Pro Gly Arg Gly Cys Arg Leu  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Pro Leu Arg Gly Asp Gln Leu Ser Gly Leu Gly Arg Arg Thr Tyr Pro  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Arg Pro His Glu Tyr Leu Ser Pro Ser Asp Leu Pro Lys Ser Trp Asp 50 60

Trp Arg Asn Val Asn Gly Val Asn Tyr Ala Ser Ala Thr Arg Asn Gln 65 70 75 80

His Ile Pro Gln Tyr Cys Gly Ser Cys Trp Ala His Gly Ser Thr Ser 85 90 95

Ala Met Ala Gly Pro Asp Gln His Gln Glu Lys Gly Gly Val Ala Leu 100 105 110

His Pro Ala Val Arg Ala Ala Arg Pro Arg Leu Arg Gln Arg Gly Leu
115 120 125

Leu

<210> 893 <211> 246 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (222) <223> Xaa equals any amino acid <220> <221> SITE <222> (223) <223> Xaa equals any amino acid <220> <221> SITE <222> (236) <223> Xaa equals any amino acid <220> <221> SITE <222> (242)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (244)

<223> Xaa equals any amino acid

<400> 893

Met Gly Ala Ala Val Phe Phe Gly Cys Thr Phe Val Ala Phe Gly Pro 1 5 10 15

Ala Phe Ala Leu Phe Leu Ile Thr Val Ala Gly Asp Pro Leu Arg Val 20 25 30

Ile Ile Leu Val Ala Gly Ala Phe Phe Trp Leu Val Ser Leu Leu Leu 35 40 45

Ala Ser Val Val Trp Phe Ile Leu Val His Val Thr Asp Arg Ser Asp 50 55 60

Ala Arg Leu Gln Tyr Gly Leu Leu Ile Phe Gly Ala Ala Val Ser Val
65 70 75 80

Leu Leu Gln Glu Val Phe Arg Phe Ala Tyr Tyr Lys Leu Leu Lys Lys
85
90
95

Ala Asp Glu Gly Leu Ala Ser Leu Ser Glu Asp Gly Arg Ser Pro Ile 100 105 110

Ser Ile Arg Gln Met Ala Tyr Val Ser Gly Leu Ser Phe Gly Ile Ile 115 120 125

Ser Gly Val Phe Ser Val Ile Asn Ile Leu Ala Asp Ala Leu Gly Pro 130 135 140

Gly Val Val Gly Ile His Gly Asp Ser Pro Tyr Tyr Phe Leu Thr Ser 145 150 155 160

Ala Phe Leu Thr Ala Ala Ile Ile Leu Leu His Thr Phe Trp Gly Val

Val Phe Phe Asp Ala Cys Glu Arg Arg Arg Tyr Trp Ala Leu Gly Leu 180 185 190

Val Val Gly Ser His Leu Leu Thr Ser Gly Leu Thr Phe Leu Asn Pro 195 200 205

Trp Tyr Glu Ala Ser Leu Leu Pro Ser Met Gln Ser Leu Xaa Xaa Trp 210 215 220

Gly Ser Gly Pro Ser Ser Gln Leu Glu Gly Pro Xaa Lys Tyr Ser Ala 225 230 235 240

Gln Xaa Leu Xaa Lys Asp 245

<210> 894

<211> 199

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (118) <223> Xaa equals any amino acid <220> <221> SITE <222> (120) <223> Xaa equals any amino acid <400> 894 Met Thr Ser Cys Gly Gln Gln Ser Leu Asn Val Leu Ala Val Leu Phe Ser Leu Leu Phe Ser Ala Val Leu Ser Ala His Phe Arg Val Cys Glu 25 Pro Tyr Thr Asp His Lys Gly Arg Tyr His Phe Gly Phe His Cys Pro Arg Leu Ser Asp Asn Lys Thr Phe Ile Leu Cys Cys His His Asn Asn Thr Val Phe Lys Tyr Cys Cys Asn Glu Thr Glu Phe Gln Ala Val Met Gln Ala Asn Leu Thr Ala Ser Ser Glu Gly Tyr Met His Asn Asn Tyr 90 Thr Ala Leu Leu Gly Val Trp Ile Tyr Gly Phe Phe Val Leu Met Leu 105 Leu Val Leu Asp Leu Xaa Tyr Xaa Ser Ala Met Asn Tyr Asp Ile Cys 120 Lys Val Tyr Leu Ala Arg Trp Gly Ile Gln Gly Arg Trp Met Lys Gln Asp Pro Arg Arg Trp Gly Asn Pro Ala Arg Ala Pro Arg Pro Gly Gln 150 155 Arg Ala Pro Gln Pro Gln Pro Pro Gly Pro Leu Pro Gln Ala Pro Gln Ala Val His Thr Leu Arg Gly Asp Ala His Ser Pro Pro Leu Met 185 Thr Phe Gln Ser Ser Ser Ala 195 <210> 895 <211> 211

<210> 895 <211> 211 <212> PRT <213> Homo sapiens <400> 895

Met Arg Leu Phe Leu Trp Asn Ala Val Leu Thr Leu Phe Val Thr Ser 1 5 10 15

Leu Ile Gly Ala Leu Ile Pro Glu Pro Glu Val Lys Ile Glu Val Leu 20 25 30

Gln Lys Pro Phe Ile Cys His Arg Lys Thr Lys Gly Gly Asp Leu Met 35 40 45

Leu Val His Tyr Glu Gly Tyr Leu Glu Lys Asp Gly Ser Leu Phe His 50 60

Ser Thr His Lys His Asn Asn Gly Gln Pro Ile Trp Phe Thr Leu Gly 65 70 75 80

Ile Leu Glu Ala Leu Lys Gly Trp Asp Gln Gly Leu Lys Gly Met Cys  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Val Gly Glu Lys Arg Lys Leu Ile Ile Pro Pro Ala Leu Gly Tyr Gly
100 105 110

Lys Glu Gly Lys Gly Lys Ile Pro Pro Glu Ser Thr Leu Ile Phe Asn 115 120 125

Ile Asp Leu Leu Glu Ile Arg Asn Gly Pro Arg Ser His Glu Ser Phe 130 135 140

Gln Glu Met Asp Leu Asn Asp Asp Trp Lys Leu Ser Lys Asp Glu Val 145 150 155 160

Lys Ala Tyr Leu Lys Lys Glu Phe Glu Lys His Gly Ala Val Val Asn 165 170 175

Glu Ser His His Asp Ala Leu Val Glu Asp Ile Phe Asp Lys Glu Asp 180 185 . 190

Glu Asp Lys Asp Gly Phe Ile Ser Ala Arg Glu Phe Thr Tyr Lys His 195 200 205

Asp Glu Leu 210

<210> 896

<211> 164

<212> PRT

<213> Homo sapiens

<400> 896

Met Thr Trp Ser Cys Leu Val Ala Met Ile Val Ser Gly Val Ile 1 5 10 15

Thr Ala Val Trp Ala Val Arg Ala Ala Pro Ile Trp Arg Ser Gln Val 20 25 30

Lys Gln Lys Met Arg Ile Gly Lys Gln Gly Asn Cys Arg Pro Pro Arg
35 40 45

Cys Ile Cys Ser Ala Leu Gly Leu Leu Ala Pro Trp Met Ala Val Val 50 55 60

Leu Ser Gln Leu Ser Val Arg Cys Val Val Ser Trp Val Gln Gly Lys
65 70 75 80

Pro Ser Ser Pro Arg Pro Arg Gly Ser Ala Ala Ser Pro Ala Pro Gly
85 90 95

Ala Thr Pro Pro Thr Pro Arg Lys Pro Val Ser Trp Leu Gly Tyr Arg 100 105 110

Glu Asn His Arg Pro Lys Lys Pro Lys Ser Cys Thr Arg Leu Pro Gly 115 120 125

Leu Pro Lys Leu Glu Pro Ser Ser Thr Leu Lys Gly Gln Asp Ser Trp 130 135 140

Gln Met Gly His Gln Gln Asp Lys Thr Leu Trp Ser Trp Ala Ser Thr 145 150 155 160

Gly Gly Ser Ser

<210> 897

<211> 56

<212> PRT

<213> Homo sapiens

<400> 897

Met Pro Leu Glu Glu Ser Phe Glu Ile Val Leu Lys Leu Val Pro Leu 1 5 10 15

Leu Gly Leu Glu Leu Phe Phe Leu Phe Ile Ile Asn Gly Tyr Ile
20 25 30

Asn Val Tyr Cys Pro Ser Gln Tyr Phe Ile Tyr Ala Lys Asp Ser Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Ala Gly Leu Ala Leu Ile Pro Gln 50 55

<210> 898

<211> 40

<212> PRT

<213> Homo sapiens

<400> 898

Met Val Ala Met Val Phe Leu Lys Ile Ser Val Leu Pro Leu Met Cys

1 10 15

Arg Gly Gln Thr Lys His Lys Val Leu Arg Asp His Ala Tyr Pro Arg 20 25 30

Val Ser Gln Lys Arg Gly His Ile 35 40

<210> 899

<211> 624

<212> PRT

<213> Homo sapiens

<400> 899

- Met Glu Ile Pro Gly Ser Leu Cys Lys Lys Val Lys Leu Ser Asn Asn 1 5 10 15
- Ala Gln Asn Trp Gly Met Gln Arg Ala Thr Asn Val Thr Tyr Gln Ala
  20 25 30
- His His Val Ser Arg Asn Lys Arg Gly Gln Val Val Gly Thr Arg Gly 35 40 45
- Gly Phe Arg Gly Cys Thr Val Trp Leu Thr Gly Leu Ser Gly Ala Gly 50 55 60
- Lys Thr Thr Val Ser Met Ala Leu Glu Glu Tyr Leu Val Cys His Gly 65 70 75 80
- Ile Pro Cys Tyr Thr Leu Asp Gly Asp Asn Ile Arg Gln Gly Leu Asn 85 90 95
- Lys Asn Leu Gly Phe Ser Pro Glu Asp Arg Glu Glu Asn Val Arg Arg 100 105 110
- Ile Ala Glu Val Ala Lys Leu Phe Ala Asp Ala Gly Leu Val Cys Ile 115 120 125
- Thr Ser Phe Ile Ser Pro Tyr Thr Gln Asp Arg Asn Asn Ala Arg Gln 130 135 140
  - Ile His Glu Gly Ala Ser Leu Pro Phe Phe Glu Val Phe Val Asp Ala 145 150 155 160
  - Pro Leu His Val Cys Glu Gln Arg Asp Val Lys Gly Leu Tyr Lys Lys 165 170 175
  - Ala Arg Ala Gly Glu Ile Lys Gly Phe Thr Gly Ile Asp Ser Glu Tyr 180 185 190
  - Glu Lys Pro Glu Ala Pro Glu Leu Val Leu Lys Thr Asp Ser Cys Asp 195 200 205
  - Val Asn Asp Cys Val Gln Gln Val Val Glu Leu Leu Gln Glu Arg Asp 210 215 220
  - Ile Val Pro Val Asp Ala Ser Tyr Glu Val Lys Glu Leu Tyr Val Pro 225 230 235 240
  - Glu Asn Lys Leu His Leu Ala Lys Thr Asp Ala Glu Thr Leu Pro Ala 245 250 255
  - Leu Lys Ile Asn Lys Val Asp Met Gln Trp Val Gln Val Leu Ala Glu 260 265 270
  - Gly Trp Ala Thr Pro Leu Asn Gly Phe Met Arg Glu Arg Glu Tyr Leu 275 280 285
  - Gln Cys Leu His Phe Asp Cys Leu Leu Asp Gly Gly Val Ile Asn Leu 290 295 300
  - Ser Val Pro Ile Val Leu Thr Ala Thr His Glu Asp Lys Glu Arg Leu

305					310					315					320
Asp	Gly	Cys	Thr	Ala 325	Phe	Ala	Leu	Met	Tyr 330	Glu	Gly	Arg	Arg	Val 335	Ala
Ile	Leu	Arg	Asn 340	Pro	Glu	Phe	Phe	Glu 345	His	Arg	Lys	Glu	Glu 350	Arg	Суѕ
Ala	Arg	Gln 355	Trp	Gly	Thr	Thr	Cys 360	Lys	Asn	His	Pro	Tyr 365	Ile	Lys	Met
Val	Met 370	Glu	Gln	Gly	Asp	Trp 375	Leu	Ile	Gly	Gly	Asp 380	Leu	Gln	Val	Leu
Asp 385	Arg	Val	Tyr	Trp	Asn 390	Asp	Gly	Leu	Asp	Gln 395	Tyr	Arg	Leu	Thr	Pro 400
Thr	Glu	Leu	Lys	Gln 405	Lys	Phe	Lys	Asp	Met 410	Asn	Ala	Asp	Ala	Val 415	Phe
Ala	Phe	Gln	Leu 420	Arg	Asn	Pro	Val	His 425	Asn	Gly	His	Ala	Leu 430	Leu	Met
Gln	Asp	Thr 435	His	Lys	Gln	Leu	Leu 440	Glu	Arg	Gly	Tyr	Arg 445	Arg	Pro	Val
Leu	Leu 450	Leu	His	Pro	Leu	Gly 455	Gly	Trp	Thr	Lys	Asp 460		Asp	Val	Pro
Leu 465	Met	Trp	Arg	Met	Lys 470	Gln	His	Ala	Ala	Val 475	Leu	Glu	Glu	Gly	Val 480
Leu	Asn	Pro	Glu	Thr 485	Thr	Val	Val	Ala	Ile 490	Phe	Pro	Ser	Pro	Met 495	Met
Tyr	Ala	Gly	Pro 500	Thr	Glu	Val	Gln	Trp 505	His	Cys	Arg	Ala	Arg 510	Met	Val
Ala	Gly	Ala 515	Asn	Phe	Tyr	Ile	Val 520	Gly	Arg	Asp	Pro	Ala 525	Gly	Met	Pro
His	Pro 530	Glu	Thr	Gly	Lys	Asp 535	Leu	Tyr	Glu	Pro	Ser 540	His	Gly	Ala	Lys
Val 545	Leu	Thr	Met	Ala	Pro 550	Gly	Leu	Ile	Thr	Leu 555	Glu	Ile	Val	Pro	Phe 560
Arg	Val	Ala	Ala	Туг 565	Asn	Lys	Lys	Lys	Lys 570	Arg	Met	Asp	Tyr	Tyr 575	Asp
Ser	Glu	His	His 580	Glu	Asp	Phe	Glu	Phe 585	Ile	Ser	Gly	Thr	Arg 590	Met	Arg
Lys	Leu	Ala 595	Arg	Glu	Gly	Gln	Lys 600	Pro	Pro	Glu	Gly	Phe 605	Met	Ala	Pro
Lys	Ala 610	Trp	Thr	Val	Leu	Thr 615	Glu	Tyr	Tyr	Lys	Ser 620	Leu	Glu	Lys	Ala

<210> 900

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<211> 967
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (40)
<223> Xaa equals any amino acid
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<222> (45)
<223> Xaa equals any amino acid
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<222> (297)
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<222> (547)
<223> Xaa equals any amino acid
Met Gln Arg Ala Val Pro Glu Gly Phe Gly Arg Arg Lys Leu Gly Ser
Asp Met Gly Asn Ala Glu Arg Ala Pro Gly Ser Arg Ser Phe Gly Pro
Val Pro Thr Leu Leu Leu Kaa Ala Ala Leu Leu Xaa Val Ser Asp
Ala Leu Gly Arg Pro Ser Glu Glu Asp Glu Glu Leu Val Val Pro Glu
Leu Glu Arg Ala Pro Gly His Gly Thr Thr Arg Leu Arg Leu His Ala
Phe Asp Gln Gln Leu Asp Leu Glu Leu Arg Pro Asp Ser Ser Phe Leu
Ala Pro Gly Phe Thr Leu Gln Asn Val Gly Arg Lys Ser Gly Ser Glu
Thr Pro Leu Pro Glu Thr Asp Leu Ala His Cys Phe Tyr Ser Gly Thr
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		115					120					125			
Val	Asn 130	Gly	Asp	Pro	Ser	Ser 135	Ala	Ala	Ala	Leu	Ser 140	Leu	Cys	Glu	Gly
Val 145	Arg	Gly	Ala	Phe	Туг 150	Leu	Leu	Gly	Glu	Ala 155	Tyr	Phe	Ile	Gln	Pro 160
Leu	Pro	Ala	Ala	Ser 165	Glu	Arg	Leu	Xaa	Thr 170	Ala	Ala	Pro	Gly	Glu 175	Lys
Pro	Pro	Ala	Pro 180	Leu	Gln	Phe	His	Leu 185	Leu	Arg	Arg	Asn	Arg 190	Gln	Gly
Asp	Val	Gly 195	Gly	Thr	Cys	Gly	Val 200	Val	Asp	Asp	Glu	Pro 205	Arg	Pro	Thr
Gly	Lys 210	Ala	Glu	Thr	Glu	Asp 215	Glu	Asp	Glu	Gly	Thr 220	Glu	Gly	Glu	Asp
Glu 225	Gly	Pro	Gln	Trp	Ser 230	Pro	Gln	Asp	Pro	Ala 235	Leu	Gln	Gly	Val	Gly 240
Gln	Pro	Thr	Gly	Thr 245	Gly	Ser	Ile	Arg	Lys 250	Lys	Arg	Phe	Val	Ser 255	Ser
His	Arg	Tyr	Val 260	Glu	Thr	Met	Leu	Val 265	Ala	Asp	Gln	Ser	Met 270	Ala	Glu
Phe	His	Gly 275	Ser	Gly	Leu	Lys	His 280	Туr	Leu	Leu	Thr	Leu 285	Phe	Ser	Val
Ala	Ala 290	Arg	Leu	Xaa	Lys	His 295	Pro	Xaa	Ile	Arg	Asn 300	Ser	Val	Ser	Leu
Val 305	Val	Val	Lys	Ile	Leu 310	Val	Ile	His	Asp	Glu 315	Gln	Lys	Gly	Pro	Glu 320
Val	Thr	Ser	Asn	Ala 325	Ala	Leu	Thr	Leu	Arg 330	Asn	Phe	Суѕ	Asn	Trp 335	Gln
Lys	Gln	His	Asn 340	Pro	Pro	Ser	Asp	Arg 345	Asp	Ala	Glu	His	Tyr 350	Asp	Thr
Ala	Ile	Leu 355	Phe	Thr	Arg	Gln	Asp 360	Leu	Cys	Gly	Ser	Gln 365	Thr	Cys	Asp
Thr	Leu 370	Gly	Met	Ala	Asp	Val 375	Gly	Thr	Val	Cys	Asp 380	Pro	Ser	Arg	Ser
Cys 385	Ser	Val	Ile	Glu	Asp 390	Asp	Gly	Leu	Gln	Ala 395	Ala	Phe	Thr	Thr	Ala 400
His	Glu	Leu	Gly	His 405	Val	Phe	Asn	Met	Pro 410	His	Asp	Asp	Ala	Lys 415	Gln
Cys	Ala	Ser	Leu 420	Asn	Gly	Val	Asn	Gln 425	Asp	Ser	His	Met	Met 430	Ala	Ser
Met	Leu	Ser	Asn	Leu	Asp	His	Ser	Gln	Pro	Trp	Ser	Pro	Cys	Ser	Ala

Tyr Met Ile Thr Ser Phe Leu Asp Asn Gly His Gly Glu Cys Leu Met Asp Lys Pro Gln Asn Pro Ile Gln Leu Pro Gly Asp Leu Pro Gly Thr 470 475 Ser Tyr Asp Ala Asn Arg Gln Cys Gln Phe Thr Phe Gly Glu Asp Ser 490 Lys His Cys Pro Asp Ala Ala Ser Thr Cys Ser Thr Leu Trp Cys Thr 505 Gly Thr Ser Gly Gly Val Leu Val Cys Gln Thr Lys His Phe Pro Trp 520 Ala Asp Gly Thr Ser Cys Gly Glu Gly Lys Trp Cys Ile Asn Gly Lys Cys Val Xaa Lys Thr Asp Arg Lys His Phe Asp Thr Pro Phe His Gly Ser Trp Gly Met Trp Gly Pro Trp Gly Asp Cys Ser Arg Thr Cys Gly 570 Gly Gly Val Gln Tyr Thr Met Arg Glu Cys Asp Asn Pro Val Pro Lys 585 Asn Gly Gly Lys Tyr Cys Glu Gly Lys Arg Val Arg Tyr Arg Ser Cys 600 Asn Leu Glu Asp Cys Pro Asp Asn Asn Gly Lys Thr Phe Arg Glu Glu Gln Cys Glu Ala His Asn Glu Phe Ser Lys Ala Ser Phe Gly Ser Gly 630 635 Pro Ala Val Glu Trp Ile Pro Lys Tyr Ala Gly Val Ser Pro Lys Asp Arg Cys Lys Leu Ile Cys Gln Ala Lys Gly Ile Gly Tyr Phe Phe Val Leu Gln Pro Lys Val Val Asp Gly Thr Pro Cys Ser Pro Asp Ser Thr Ser Val Cys Val Gln Gly Gln Cys Val Lys Ala Gly Cys Asp Arg Ile 695 Ile Asp Ser Lys Lys Lys Phe Asp Lys Cys Gly Val Cys Gly Gly Asn Gly Ser Thr Cys Lys Lys Ile Ser Gly Ser Val Thr Ser Ala Lys Pro Gly Tyr His Asp Ile Ile Thr Ile Pro Thr Gly Ala Thr Asn Ile Glu 745 Val Lys Gln Arg Asn Gln Arg Gly Ser Arg Asn Asn Gly Ser Phe Leu

Ala Ile Lys Ala Ala Asp Gly Thr Tyr Ile Leu Asn Gly Asp Tyr Thr 770 775 780

Leu Ser Thr Leu Glu Gln Asp Ile Met Tyr Lys Gly Val Val Leu Arg 785 790 795 800

Tyr Ser Gly Ser Ser Ala Ala Leu Glu Arg Ile Arg Ser Phe Ser Pro 805 810 815

Leu Lys Glu Pro Leu Thr Ile Gln Val Leu Thr Val Gly Asn Ala Leu 820 825 830

Arg Pro Lys Ile Lys Tyr Thr Tyr Phe Val Lys Lys Lys Glu Ser 835 840 845

Phe Asn Ala Ile Pro Thr Phe Ser Ala Trp Val Ile Glu Glu Trp Gly 850 855 860

Glu Cys Ser Lys Ser Cys Glu Leu Gly Trp Gln Arg Arg Leu Val Glu 865 870 875 880

Cys Arg Asp Ile Asn Gly Gln Pro Ala Ser Glu Cys Ala Lys Glu Val 885 890 895

Lys Pro Ala Ser Thr Arg Pro Cys Ala Asp His Pro Cys Pro Gln Trp 900 905 910

Gln Leu Gly Glu Trp Ser Ser Cys Ser Lys Thr Cys Gly Lys Gly Tyr 915 920 925

Lys Lys Arg Ser Leu Lys Cys Leu Ser His Asp Gly Gly Val Leu Ser 930 935 940

His Glu Ser Cys Asp Pro Leu Lys Lys Pro Lys His Phe Ile Asp Phe 945 950 955 960

Cys Thr Met Ala Glu Cys Ser 965

<210> 901

<211> 119

<212> PRT

<213> Homo sapiens

<400> 901

Met His Pro Ala Arg Lys Leu Leu Ser Leu Leu Phe Leu Ile Leu Met
1 5 10 15

Gly Thr Glu Leu Thr Gln Asp Ser Ala Ala Pro Asp Ser Leu Leu Arg 20 25 30

Ser Ser Lys Gly Ser Thr Arg Gly Ser Leu Ala Ala Ile Val Ile Trp 35 40 45

Arg Gly Lys Ser Glu Ser Arg Ile Ala Lys Thr Pro Gly Ile Phe Arg 50 55 60

Gly Gly Gly Thr Leu Val Leu Pro Pro Thr His Thr Pro Glu Trp Leu

65 70 75 80

Ile Leu Pro Leu Gly Ile Thr Leu Pro Leu Gly Ala Pro Glu Thr Gly 85 90 95

Gly Gly Asp Cys Ala Ala Glu Thr Trp Lys Gly Ser Gln Arg Ala Gly
100 105 110

Gln Leu Cys Ala Leu Leu Ala 115

<210> 902

<211> 131

<212> PRT

<213> Homo sapiens ·

<400> 902

Met Leu Phe Val Phe Cys Cys Thr Val Phe Phe Val Cys Leu Phe Val 1 5 10 15

Tyr Leu Val Gly Phe Leu Glu Arg Glu Ile Trp Lys Arg Asp Ile His 20 25 30

Lys Ser Tyr Thr Pro Thr Phe Pro Phe Tyr His Asp Ile Gln Glu Glu 35 40 45

Thr Ser Arg Ala Lys Asn Gly Val Lys Lys Gly Ser Met Ala Gly Thr 50 60

Ser Lys Glu Leu Arg Ala Val Ala Leu Lys Asn Tyr Phe Phe Tyr Tyr 65 70 75 80

Tyr Phe Glu Ser Met Glu Val Phe His Ser Leu Gly Lys Gly Gly Lys 85 90 95

Ser Ala Phe Ile Phe Ile Gln Ser Tyr Leu Ile Thr Ser Lys Thr His  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$ 

Met Leu Glu Ile Ala Phe Ala Gly Ala Lys Tyr Ile Asn Glu Glu 115 120 125

Tyr Ile His 130

<210> 903

<211> 97

<212> PRT

<213> Homo sapiens

<400> 903

Met Ser Ile Met Leu Leu Thr Phe Thr Leu His Phe Pro Ser Thr Leu
1 10 15

Leu Ser Tyr Leu Pro Glu Asn Tyr Val Ile Pro Ser Leu Phe Ser Asn 20 25 30

Leu Gln His Trp Ile Cys Cys Val His Ser Gln Leu Val Thr Cys Phe

35 40 45

Val Phe Gln Arg Asp Asn Val Ser Thr Glu Lys Arg Thr Leu Ala His 50 60

Ser Asn Thr Ser Ser Ala Thr Ser His His Leu Ser Pro Cys Thr Thr 65 70 75 80

Gly Asp Gly Leu Pro Ser Ser Trp Gly Gly Gln Thr His Pro Leu Leu 85 90 95

His

<210> 904

<211> 41

<212> PRT

<213> Homo sapiens

<400> 904

Met Cys Val Cys Leu Ile Cys Ser Ile Cys Gln Phe Leu Trp Cys Lys 1 5 10 15

Tyr Ser His Tyr Ser Cys Phe Gln Ala Asn Ile Val Ile Pro Gln Lys 20 25 30

Met Glu Leu Gly Arg His Asn Gln Asp 35 40

<210> 905

<211> 15

<212> PRT

<213> Homo sapiens

<400> 905

Met Ser Leu Ala Leu Cys Leu Val Pro Leu Val Arg Glu Gly His 1 5 10 15

<210> 906

<211> 211

<212> PRT

<213> Homo sapiens

<400> 906

Met Val Phe Leu Lys Phe Phe Cys Met Ser Phe Phe Cys His Leu Cys 1 5 10 15

Gln Gly Tyr Phe Asp Gly Pro Leu Tyr Pro Glu Met Ser Asn Gly Thr 20 25 30

Leu His His Tyr Phe Val Pro Asp Gly Asp Tyr Glu Glu Asn Asp Asp
35 40 45

Pro Glu Lys Cys Gln Leu Leu Phe Arg Val Ser Asp His Arg Arg Cys 50 55 60

Ser Gln Gly Glu Gly Ser Gln Val Gly Ser Leu Leu Ser Leu Thr Leu Arg Glu Glu Phe Thr Val Leu Gly His Gln Val Glu Asp Ala Gly Arg Val Leu Glu Gly Ile Ser Lys Ser Ile Ser Tyr Asp Leu Asp Gly Glu 105 Glu Ser Tyr Gly Lys Tyr Leu Arg Arg Glu Ser His Gln Ile Gly Asp Ala Tyr Ser Asn Ser Asp Lys Ser Leu Thr Glu Leu Glu Ser Lys Phe 135 Lys Gln Gly Gln Glu Gln Asp Ser Arg Gln Glu Ser Arg Leu Asn Glu Asp Phe Leu Gly Met Leu Val His Thr Arg Ser Leu Leu Lys Glu Thr 170 Leu Asp Ile Ser Val Gly Leu Arg Asp Lys Tyr Glu Leu Leu Ala Leu Thr Ile Arg Ser His Gly Thr Arg Leu Gly Arg Leu Lys Asn Asp Tyr Leu Lys Val 210 <210> 907 <211> 53 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (49) <223> Xaa equals any amino acid <400> 907 Met Ser His His Ala Gly Leu Gly Gly Gly Ile Leu Phe Ser Leu Lys Ile Ser Phe Phe Ile Ala Leu Ala Val Val Gly Gly Ser Arg Gly Val Asn Asp Cys Gln Leu Gly Gly Cys Arg Val Gly Ser Cys Pro Arg Val 40 Xaa Val Arg Val Ala 50 <210> 908 <211> 48

<212> PRT

<213> Homo sapiens

<400> 908

Met Met Leu Tyr Gln Asn Met Leu Leu Tyr Phe Arg Ile Ile Gly Val 1 5 10 15

Leu Ala Leu Asn Phe Ser Ile Ser Pro Ile Phe Phe His Gly Ser Leu 20 25 30

Gly Lys Leu Tyr Val Tyr Ser Ala Ala Lys Tyr Ser Leu Glu Leu Lys 35 40 45

<210> 909

<211> 201

<212> PRT

<213> Homo sapiens

<400> 909

Met Lys Leu Leu Ile Leu Phe Leu Ser His Leu Leu Ser Leu Ala Phe 1 5 10 15

Gly Ile Leu Cys Leu Ser Val Thr Val Ile Leu Ser Leu Leu Leu Ser 20 25 30

Phe Ser Lys Arg Gly Phe Ser Val Arg Ser Phe Gly Thr Gly Thr His  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Val Lys Leu Pro Gly Pro Ala Pro Asp Lys Pro Asn Val Tyr Asp Phe 50 60

Lys Thr Thr Tyr Asp Gln Met Tyr Asn Asp Leu Leu Arg Lys Asp Lys 65 70 75 80

Glu Leu Tyr Thr Gln Asn Gly Ile Leu His Met Leu Asp Arg Asn Lys 85 90 95

Arg Ile Lys Pro Arg Pro Glu Arg Phe Gln Asn Cys Lys Asp Leu Phe 100 105 110

Asp Leu Ile Leu Thr Cys Glu Glu Arg Val Tyr Asp Gln Val Val Glu 115 120 125

Asp Leu Asn Ser Arg Glu Gln Glu Thr Cys Gln Pro Val His Val Val 130 135 140

Asn Val Asp Ile Gln Asp Asn His Glu Glu Ala Thr Leu Gly Ala Phe 145 150 155 160

Leu Ile Cys Glu Leu Cys Gln Cys Ile Gln His Thr Glu Asp Met Glu 165 170 175

Asn Glu Ile Asp Glu Leu Leu Gln Glu Phe Glu Glu Lys Ser Gly Arg 180 185 190

Thr Phe Leu His Thr Val Cys Phe Tyr 195 200

<210> 910

<211> 420

<212> PRT

<213> Homo sapiens

<400> 910

Met Ala Pro Trp Pro Pro Lys Gly Leu Val Pro Ala Val Leu Trp Gly
1 5 10 15

Leu Ser Leu Phe Leu Asn Leu Pro Gly Pro Ile Trp Leu Gln Pro Ser 20 25 30

Pro Pro Pro Gln Ser Ser Pro Pro Pro Gln Pro His Pro Cys His Thr
35 40 45

Cys Arg Gly Leu Val Asp Ser Phe Asn Lys Gly Leu Glu Arg Thr Ile 50 55 60

Arg Asp Asn Phe Gly Gly Asn Thr Ala Trp Glu Glu Glu Asn Leu 65 70 75 80

Ser Lys Tyr Lys Asp Ser Glu Thr Arg Leu Val Glu Val Leu Glu Gly 85 90 95

-Val Cys Ser Lys Ser Asp Phe Glu Cys His Arg Leu Leu Glu Leu Ser 100 105 110

Glu Glu Leu Val Glu Ser Trp Trp Phe His Lys Gln Gln Glu Ala Pro 115 120 125

Asp Leu Phe Gln Trp Leu Cys Ser Asp Ser Leu Lys Leu Cys Cys Pro 130 135 140

Ala Gly Thr Phe Gly Pro Ser Cys Leu Pro Cys Pro Gly Gly Thr Glu 145 150 155 160

Arg Pro Cys Gly Gly Tyr Gly Gln Cys Glu Gly Glu Gly Thr Arg Gly 165 170 175

Gly Ser Gly His Cys Asp Cys Gln Ala Gly Tyr Gly Gly Glu Ala Cys 180 185 190

Gly Gln Cys Gly Leu Gly Tyr Phe Glu Ala Glu Arg Asn Ala Ser His 195 200 205

Leu Val Cys Ser Ala Cys Phe Gly Pro Cys Ala Arg Cys Ser Gly Pro 210 215 220

Glu Glu Ser Asn Cys Leu Gln Cys Lys Lys Gly Trp Ala Leu His His 225 230 235 240

Leu Lys Cys Val Asp Ile Asp Glu Cys Gly Thr Glu Gly Ala Asn Cys 245 250 255

Gly Ala Asp Gln Phe Cys Val Asn Thr Glu Gly Ser Tyr Glu Cys Arg 260 265 270

Asp Cys Ala Lys Ala Cys Leu Gly Cys Met Gly Ala Gly Pro Gly Arg

275 280 285

Cys Lys Cys Ser Pro Gly Tyr Gln Gln Val Gly Ser Lys Cys Leu 290 295 300

Asp Val Asp Glu Cys Glu Thr Glu Val Cys Pro Gly Glu Asn Lys Gln 305 310 315 320

Cys Glu Asn Thr Glu Gly Gly Tyr Arg Cys Ile Cys Ala Glu Gly Tyr 325 330 335

Lys Gln Met Glu Gly Ile Cys Val Lys Glu Gln Ile Pro Glu Ser Ala 340 345 350

Gly Phe Phe Ser Glu Met Thr Glu Asp Glu Leu Val Val Leu Gln Gln 355 360 365

Met Phe Phe Gly Ile Ile Ile Cys Ala Leu Ala Thr Leu Ala Ala Lys 370 375 380

Gly Asp Leu Val Phe Thr Ala Ile Phe Ile Gly Ala Val Ala Ala Met 385 390 395 400

Thr Gly Tyr Trp Leu Ser Glu Arg Ser Asp Arg Val Leu Glu Gly Phe
405 410 415

Ile Lys Gly Arg

<210> 911

<211> 387

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (228)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (359)

<223> Xaa equals any amino acid

<400> 911

Met Gly Ala Phe Leu Asp Lys Pro Lys Thr Glu Lys His Asn Ala His 1 5 10 15

Gly Ala Gly Asn Gly Leu Arg Tyr Gly Leu Ser Ser Met Gln Gly Trp
20 25 30

Arg Val Glu Met Glu Asp Ala His Thr Ala Val Val Gly Ile Pro His  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Leu Glu Asp Trp Ser Phe Phe Ala Val Tyr Asp Gly His Ala Gly
50 55 60

Ser Arg Val Ala Asn Tyr Cys Ser Thr His Leu Leu Glu His Ile Thr 65 70 75 80

Thr Asn Glu Asp Phe Arg Ala Ala Gly Lys Ser Gly Ser Ala Leu Glu Leu Ser Val Glu Asn Val Lys Asn Gly Ile Arg Thr Gly Phe Leu Lys Ile Asp Glu Tyr Met Arg Asn Phe Ser Asp Leu Arg Asn Gly Met Asp Arg Ser Gly Ser Thr Ala Val Gly Val Met Ile Ser Pro Lys His Ile 140 Tyr Phe Ile Asn Cys Gly Asp Ser Arg Ala Val Leu Tyr Arg Asn Gly 150 Gln Val Cys Phe Ser Thr Gln Asp His Lys Pro Cys Asn Pro Arg Glu Lys Glu Arg Ile Gln Asn Ala Gly Gly Ser Val Met Ile Gln Arg Val 185 Asn Gly Ser Leu Ala Val Ser Arg Ala Leu Gly Asp Tyr Asp Tyr Lys Cys Val Asp Gly Lys Gly Pro Thr Glu Gln Leu Val Ser Pro Glu Pro 215 Glu Val Tyr Xaa Ile Leu Arg Ala Glu Glu Asp Glu Phe Ile Ile Leu Ala Cys Asp Gly Ile Trp Asp Val Met Ser Asn Glu Glu Leu Cys Glu Tyr Val Lys Ser Arg Leu Glu Val Ser Asp Asp Leu Glu Asn Val Cys 265 Asn Trp Val Val Asp Thr Cys Leu His Lys Gly Ser Arg Asp Asn Met Ser Ile Val Leu Val Cys Phe Ser Asn Ala Pro Lys Val Ser Asp Glu 295 Ala Val Lys Lys Asp Ser Glu Leu Asp Lys His Leu Glu Ser Arg Val Glu Glu Ile Met Glu Lys Ser Gly Glu Glu Gly Met Pro Asp Leu Ala 330 His Val Met Arg Ile Leu Ser Ala Glu Asn Ile Pro Asn Leu Pro Pro Gly Gly Gly Leu Ala Gly Xaa Arg Asn Val Ile Glu Ala Val Tyr Ser 360 Arg Leu Asn Pro His Arg Glu Ser Asp Gly Gly Ala Gly Asp Leu Glu 375 Asp Pro Trp 385

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<210> 912
<211> 59
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (15)
<223> Xaa equals any amino acid
<400> 912
Met Asn Cys Asp Val Leu Trp Cys Val Leu Leu Val Cys Xaa Ser
                                   10
Leu Phe Ser Ala Val Gly His Gly Leu Trp Ile Trp Arg Tyr Gln Glu
Lys Lys Ser Leu Phe Tyr Val Pro Lys Ser Asp Gly Ser Ser Leu Ser
                            40
Pro Val Thr Ala Ala Val Asn Ser Phe Leu Thr
<210> 913
<211> 80
<212> PRT
<213> Homo sapiens
<400> 913
Met Glu Ser Leu Pro Glu Asn Lys Pro Leu Val Trp Ser Leu Ala Val
Ser Leu Leu Ala Ile Ile Gly Leu Leu Cly Ser Ser Pro Asp Phe
                                25
Asn Ser Gln Phe Gly Leu Val Asp Ile Pro Val Glu Phe Lys Leu Val
Ile Ala Gln Val Leu Leu Leu Asp Phe Cys Leu Ala Leu Leu Ala Asp
Arg Val Leu Gln Phe Phe Leu Gly Thr Pro Lys Leu Lys Val Pro Ser
                     70
                                        75
<210> 914
<211> 44
<212> PRT
<213> Homo sapiens
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567

10

Met His Leu Leu Leu Ile Asn Phe Leu Pro Ala Val Cys Ile Ile Leu

<400> 914

Leu Lys Asn Leu Gln Gln Ala Leu Cys Phe Ala Gln Leu Phe Ile Met 20

Ser Ile Asn Gln Gly Leu Gly Pro Asn Glu Met Ser 35

<210> 915
<211> 52
<212> PRT
<213> Homo sapiens

<400> 915

Met Gln Arg Leu Gly Lys Ala Pro Gly Thr Trp Gln Ala Ile Ser Lys 10

Cys Trp Leu Leu Leu Leu Ser Leu Pro Phe Ser Gln Ser Ile Ile 25

Ile Ser Leu Arg Ala Gly Thr Met Ser Tyr Leu Pro Leu Tyr Phe Pro 35

Ala Try Phe Pro Asn Glu Met Ser Phe Ala Gln Leu Pro Phe Pro Asn Glu Met Ser Ileu Pro Phe Pro

Gln Tyr Phe Pro 50

<210> 916

<211> 78 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any amino acid <220> <221> SITE <222> (42) <223> Xaa equals any amino acid <220> <221> SITE <222> (43) <223> Xaa equals any amino acid <400> 916 Met Phe Gly Ala His Arg Xaa Trp Gln Gly Ser Val Leu Leu Phe Leu

Ser Phe Ala Trp Gly Asn Gly Gly Ser Val Thr Phe Ser Asp Val Pro

Arg Val Met Pro Leu Ala Gly Gly Pro Xaa Xaa Gln Val Ser Ser Thr 35 40 45

Pro Arg Pro Pro Pro His Gln Val Thr Ser Ser Pro Gly Leu Glu Ser 50 55 60

Ala His Ile Val Cys Pro Glu Arg Lys Lys Lys Lys Lys 65 70 75

<210> 917

<211> 54

<212> PRT

<213> Homo sapiens

<400> 917

Met Lys Thr His Leu Leu Met Phe Leu Leu Ser Cys Met Ala Arg Cys 1 5 10 15

Thr Gly Ile Val Pro Lys Arg Pro Gln Pro Ala Phe Pro Leu Arg Gly
20 25 30

Arg Arg Lys Asn Ser Phe Leu Phe Leu Leu Ser Phe Ser Ile Glu 35 40 45

Phe Leu Leu Cys Val Trp 50

<210> 918

<211> 47.

<212> PRT

<213> Homo sapiens

<400> 918

Met Ile Asn Glu Trp Cys Phe Lys Leu Leu Ser Leu Trp Ser Phe Ala

Tyr Ser Asn Cys Lys Leu Ile His Lys Cys Lys Phe Val Phe Leu Lys 20 25 30

Lys Lys Thr Gly Lys Glu Val Ser Val Lys Gly Ser Lys Leu 35 40 45

<210> 919

<211> 159

<212> PRT

<213> Homo sapiens

<400> 919

Met Leu Leu Leu Ile Phe Trp Ile Ala Pro Ala His Gly Pro Thr 1 5 10 15

Asn Ile Met Val Tyr Ile Ser Ile Cys Ser Leu Leu Gly Ser Phe Thr 20 25 30

Val Pro Ser Thr Lys Gly Ile Gly Leu Ala Ala Gln Asp Ile Leu His
35 40 45

Asn Asn Pro Ser Ser Gln Arg Ala Leu Cys Leu Cys Leu Val Leu Leu 50 55 60

Ala Val Leu Gly Cys Ser Ile Ile Val Gln Phe Arg Tyr Ile Asn Lys 65 70 75 80

Ala Leu Glu Cys Phe Asp Ser Ser Val Phe Gly Ala Ile Tyr Tyr Val 85 90 95

Val Phe Thr Thr Leu Val Leu Leu Ala Ser Ala Ile Leu Phe Arg Glu 100 105 110

Trp Ser Asn Val Gly Leu Val Asp Phe Leu Gly Met Ala Cys Gly Phe
115 120 125

Thr Thr Val Ser Val Gly Ile Val Leu Ile Gln Val Phe Lys Glu Phe 130 135 140

Asn Phe Asn Leu Gly Glu Met Asn Lys Ser Asn Met Lys Thr Asp 145 150 155

<210> 920

<211> 102

<212> PRT

<213> Homo sapiens

<400> 920

Met Thr Val Arg Arg Leu Ser Leu Leu Cys Arg Asp Leu Trp Ala Leu 1 5 10 15

Trp Leu Leu Lys Ala Gly Ala Val Arg Gly Ala Arg Ala Gly Pro 20 25 30

Arg Leu Pro Gly Arg Cys Cys Gly Ala Thr Cys Gly Asp Ala Gly Arg
35 40 45

Cly Trp Thr Phe Trp Ala Gln Pro Cys Pro Gln Arg Leu Leu Gly Gln 50 55 60

Lys Pro Gly Ala Gly Gly Cys Arg Gly Trp Val Leu Gly Trp Val Pro 65 70 75 80

Pro Arg Pro Glu Glu Pro Cys Ser Leu Ala Gly Lys Val Cys Thr Gly 85 90 95

Leu Ala Arg Trp Met Val 100

<210> 921

<211> 53

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any amino acid

<400> 921

Met Cys Lys Ala Val Cys Lys His Arg Leu Xaa Leu Phe Ala Val Ser

1 5 10 15

Ser Phe Ser Leu Gly Leu Gly Trp Val Cys Val Leu Val Leu Met Leu 20 25 30

Trp Pro Val Arg Leu Ser Leu Ala Pro Arg Pro Val Gln Leu Gln Gln 35 40 45

Arg Arg Ser His Cys 50

<210> 922

<211> 472

<212> PRT

<213> Homo sapiens

<400> 922

Met Lys Phe Leu Ile Phe Ala Phe Phe Gly Gly Val His Leu Leu Ser 1 5 10 15

Leu Cys Ser Gly Lys Ala Ile Cys Lys Asn Gly Ile Ser Lys Arg Thr 20 25 30

Phe Glu Glu Ile Lys Glu Glu Ile Ala Ser Cys Gly Asp Val Ala Lys 35 40 45

Ala Ile Ile Asn Leu Ala Val Tyr Gly Lys Ala Gln Asn Arg Ser Tyr 50 55 60

Glu Arg Leu Ala Leu Leu Val Asp Thr Val Gly Pro Arg Leu Ser Gly 65 70 75 80

Ser Lys Asn Leu Glu Lys Ala Ile Gln Ile Met Tyr Gln Asn Leu Gln 85 90 95

Gln Asp Gly Leu Glu Lys Val His Leu Glu Pro Val Arg Ile Pro His 100 105 110

Trp Glu Arg Gly Glu Ser Ala Val Met Leu Glu Pro Arg Ile His 115 120 125

Lys Ile Ala Ile Leu Gly Leu Gly Ser Ser Ile Gly Thr Pro Pro Glu 130 135 140

Gly Ile Thr Ala Glu Val Leu Val Val Thr Ser Phe Asp Glu Leu Gln 145 150 155 160

Arg Arg Ala Ser Glu Ala Arg Gly Lys Ile Val Val Tyr Asn Gln Pro 165 170 175

Tyr Ile Asn Tyr Ser Arg Thr Val Gln Tyr Arg Thr Gln Gly Ala Val 180 185 190

Glu Ala Ala Lys Val Gly Ala Leu Ala Ser Leu Ile Arg Ser Val Ala 195 200 205

Ser Phe Ser Ile Tyr Ser Pro His Thr Gly Ile Gln Glu Tyr Gln Asp 210 215 220

Gly Val Pro Lys Ile Pro Thr Ala Cys Ile Thr Val Glu Asp Ala Glu 230 235 Met Met Ser Arg Met Ala Ser His Gly Ile Lys Ile Val Ile Gln Leu Lys Met Gly Ala Lys Thr Tyr Pro Asp Thr Asp Ser Phe Asn Thr Val 265 Ala Glu Ile Thr Gly Ser Lys Tyr Pro Glu Gln Val Val Leu Val Ser Gly His Leu Asp Ser Trp Asp Val Gly Gln Gly Ala Met Asp Asp Gly Gly Gly Ala Phe Ile Ser Trp Glu Ala Leu Ser Leu Ile Lys Asp Leu 310 315 Gly Leu Arg Pro Lys Arg Thr Leu Arg Leu Val Leu Trp Thr Ala Glu Glu Gln Gly Gly Val Gly Ala Phe Gln Tyr Tyr Gln Leu His Lys Val Asn Ile Ser Asn Tyr Ser Leu Val Met Glu Ser Asp Ala Gly Thr Phe 360 Leu Pro Thr Gly Leu Gln Phe Thr Gly Ser Glu Lys Ala Arg Ala Ile 375 Met Glu Glu Val Met Ser Leu Leu Gln Pro Leu Asn Ile Thr Gln Val 395 Leu Ser His Gly Glu Gly Thr Asp Ile Asn Phe Trp Ile Gln Ala Gly Val Pro Gly Ala Ser Leu Leu Asp Asp Leu Tyr Lys Tyr Phe Phe Phe 420 425 His His Ser His Gly Asp Thr Met Thr Val Met Asp Pro Lys Gln Met Asn Val Ala Ala Val Trp Ala Val Val Ser Tyr Val Val Ala Asp 450 455 Met Glu Glu Met Leu Pro Arg Ser 470 <210> 923 <211> 359 <212> PRT <213> Homo sapiens <400> 923

Met Lys Leu Gly Cys Val Leu Met Ala Trp Ala Leu Tyr Leu Ser Leu 1 5 10 15

Gly Val Leu Trp Val Ala Gln Met Leu Leu Ala Ala Ser Phe Glu Thr  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Leu Gln Cys Glu Gly Pro Val Cys Thr Glu Glu Ser Ser Cys His Thr Glu Asp Asp Leu Thr Asp Ala Arg Glu Ala Gly Phe Gln Val Lys Ala Tyr Thr Phe Ser Glu Pro Phe His Leu Ile Val Ser Tyr Asp Trp Leu Ile Leu Gln Gly Pro Ala Lys Pro Val Phe Glu Gly Asp Leu Leu Val Leu Arg Cys Gln Ala Trp Gln Asp Trp Pro Leu Thr Gln Val Thr Phe 105 Tyr Arg Asp Gly Ser Ala Leu Gly Pro Pro Gly Pro Asn Arg Glu Phe 120 Ser Ile Thr Val Val Gln Lys Ala Asp Ser Gly His Tyr His Cys Ser Gly Ile Phe Gln Ser Pro Gly Pro Gly Ile Pro Glu Thr Ala Ser Val 155 Val Ala Ile Thr Val Gln Glu Leu Phe Pro Ala Pro Ile Leu Arg Ala 165 170 Val Pro Ser Ala Glu Pro Gln Ala Gly Gly Pro Met Thr Leu Ser Cys Gln Thr Lys Leu Pro Leu Gln Arg Ser Ala Ala Arg Leu Leu Phe Ser 200 Phe Tyr Lys Asp Gly Arg Ile Val Gln Ser Arg Gly Leu Ser Ser Glu Phe Gln Ile Pro Thr Ala Ser Glu Asp His Ser Gly Ser Tyr Trp Cys 230 235 Glu Ala Ala Thr Glu Asp Asn Gln Val Trp Lys Gln Ser Pro Gln Leu Glu Ile Arg Val Gln Gly Ala Ser Ser Ala Ala Pro Pro Thr Leu 265 Asn Pro Ala Pro Gln Lys Ser Ala Ala Pro Gly Thr Ala Pro Glu Glu Ala Pro Gly Pro Leu Pro Pro Pro Thr Pro Ser Ser Glu Asp Pro 295 300 Gly Phe Ser Ser Pro Leu Gly Met Pro Asp Pro His Leu Tyr His Gln Met Gly Leu Leu Lys His Met Gln Asp Val Arg Val Leu Leu Gly His Leu Leu Met Glu Leu Arg Glu Leu Ser Gly His Arg Lys Pro Gly 340

Thr Thr Lys Ala Thr Ala Glu 355

<210> 924 <211> 379 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (283) <223> Xaa equals any amino acid <220> <221> SITE <222> (303) <223> Xaa equals any amino acid <220> <221> SITE <222> (307) <223> Xaa equals any amino acid Met Gly Tyr Ile Asp Asp Pro Asp Lys Tyr His Gln Gly Phe Glu Leu 10 Leu Leu Ser Ala Leu Gly Asp Pro Ser Glu Arg Val Val Ser Ala Thr His Gln Val Phe Leu Pro Ala Tyr Ala Ala Trp Thr Thr Glu Leu Gly Asn Leu Gln Ser His Leu Ile Leu Thr Leu Leu Asn Lys Ile Glu Lys Leu Leu Arg Glu Gly Glu His Gly Leu Asp Glu His Lys Leu His Met Tyr Leu Ser Ala Leu Gln Ser Leu Ile Pro Ser Leu Phe Ala Leu Val Leu Gln Asn Ala Pro Phe Ser Ser Lys Ala Lys Leu His Gly Glu Val Pro Gln Ile Glu Val Thr Arg Phe Pro Arg Pro Met Ser Pro Leu Gln 120 Asp Val Ser Thr Ile Ile Gly Ser Arg Glu Gln Leu Ala Val Leu Leu Gln Leu Tyr Asp Tyr Gln Leu Glu Gln Glu Gly Thr Thr Gly Trp Glu Ser Leu Leu Trp Val Val Asn Gln Leu Leu Pro Gln Leu Ile Glu Ile Val Gly Lys Ile Asn Val Thr Ser Thr Ala Cys Val His Glu Phe Ser

185

Arg Phe Phe Trp Arg Leu Cys Arg Thr Phe Gly Lys Ile Phe Thr Asn  $195 \hspace{1.5cm} 200 \hspace{1.5cm} 205 \hspace{1.5cm}$ 

Thr Lys Val Lys Pro Gln Phe Gln Glu Ile Leu Arg Leu Ser Glu Glu 210 215 220

Asn Ile Asp Ser Ser Ala Gly Asn Gly Val Leu Thr Lys Ala Thr Val 225 230 235 240

Pro Ile Tyr Ala Thr Gly Val Leu Thr Cys Tyr Ile Gl<br/>n Glu Glu Asp 245 250 255

Arg Lys Leu Leu Val Gly Phe Leu Glu Asp Val Met Thr Leu Leu Ser 260 265 270

Leu Ser His Ala Pro Leu Asp Ser Leu Lys Xaa Ser Phe Val Glu Leu 275 280 285

Gly Ala Asn Gln Ala Tyr His Glu Leu Leu Leu Thr Val Leu Xaa Tyr 290 295 300

Gly Val Xaa His Thr Ser Ala Leu Val Arg Cys Thr Ala Ala Arg Met 305 310 315 320

Phe Glu Leu Val Lys Gly Val Asn Glu Thr Leu Val Ala Gln Arg 325 330 335

Val Val Pro Ala Leu Ile Thr Leu Ser Ser Asp Pro Glu Ile Ser Val 340 345 350

Arg Ile Ala Thr Ile Pro Ala Phe Gly Thr Ile Met Glu Thr Val Ile 355 360 365

Gln Arg Glu Leu Leu Glu Arg Val Lys Met Gln 370 375

<210> 925

<211> 48

<212> PRT

<213> Homo sapiens

<400> 925

Met Ser Thr Val Thr Trp Leu Leu Lys Leu Phe Thr Gln Phe Met Phe 1 5 10 15

Pro Pro Thr Val Ser Asn Ser His Thr Cys Ala Arg Tyr Tyr Val Phe 20 25 30

Asn Phe Cys Leu Ile Ile Ser Phe Asn Phe Asn Phe His Tyr His Trp  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

<210> 926

<211> 58

PCT/US02/08277

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WO 03/038063
<212> PRT
<213> Homo sapiens
<400> 926
Met Pro Phe Ala Trp Asn Asp Leu Thr Ser Leu Leu Phe Tyr Leu Ala
Gly Cys Phe Ser Ser Cys Arg Leu Gly Gln Gly Thr Pro Gly Ser Leu
Pro Trp Thr Ser Asn Glu Glu Gly Ile Ile Gln Gly Pro Thr Pro Met
Phe Trp Asn Leu Thr Pro Phe Ser Gly Thr
    50
<210> 927
<211> 100
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
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<222> (92)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (96)

<2,23> Xaa equals any amino acid

<400> 927

Met Phe Val Ala Val Phe Tyr Trp Val Leu Thr Val Phe Phe Leu Ile

Ile Tyr Ile Thr Met Thr Tyr Thr Arg Ile Pro Gln Val Pro Trp Thr

Thr Val Gly Leu Cys Phe Asn Gly Ser Ala Phe Val Leu Tyr Leu Ser

Ala Ala Val Val Asp Ala Ser Ser Val Ser Pro Glu Lys Asp Ser His

Asn Phe Asn Ser Trp Ala Ala Ser Ser Phe Phe Ala Phe Leu Val Thr 70

Ile Cys Tyr Ala Gly Asn Thr Tyr Phe Ser Phe Xaa Ala Trp Arg Xaa

Arg Thr Ile Gln 100

<210> 928 <211> 142 <212> PRT

<213> Homo sapiens

<400> 928 Met Gly Cys Leu Val Trp Gly Pro Ser Trp Pro Pro Leu Ser Leu Leu Ala Ser Leu Leu His Ser Gly Ile Ala Gly Arg Cys Leu Leu Cys Leu Phe Lys Gly Leu Ala Ala Ala Ser Leu Gln Ile Arg Asp Leu Ala Ser Arg Leu Thr Thr Gly Pro Arg Thr Cys Arg Val Gln Pro Pro His Pro Gln Ser Ser Pro Pro Trp Pro Gly Pro Pro Gly Ala Glu Thr Cys Arg Pro Leu Ser Arg Thr Val Gly Gly Val Cys Pro Ser Asp Trp Pro Val Ser Trp Leu Leu Pro Pro Leu Pro Glu Val Val Thr Cys Ser Cys Pro Arg Ile Lys Ala Arg Pro Glu Arg Thr Pro Glu Leu Leu Cys Ala Trp Gly Gly Arg Gly Lys His Ser Gln Leu Val Ala 135 <210> 929 <211> 57 <212> PRT <213> Homo sapiens <400> 929 Met Val Tyr Arg Ala Phe Leu Ile Ile Ile Leu Arg Phe Ile Leu Ile

Phe Leu Phe Lys Leu Asn Tyr Ser Lys Leu Cys Pro Glu Ile Pro Phe

Gly Leu Lys Phe Phe Ser Phe Val Cys Ile Lys Val Gln Ile Lys Lys

Thr Ser Arg Lys Arg Arg Pro Tyr Leu

<210> 930 <211> 262 <212> PRT

<213> Homo sapiens

<400> 930

Met Leu Phe Ser Ala Leu Leu Glu Val Ile Trp Ile Leu Ala Ala

Asp Gly Gly Gln His Trp Thr Tyr Glu Gly Pro His Gly Gln Asp His

20 25 30

Trp Pro Ala Ser Tyr Pro Glu Cys Gly Asn Asn Ala Gln Ser Pro Ile
35 40 45

Asp Ile Gln Thr Asp Ser Val Thr Phe Asp Pro Asp Leu Pro Ala Leu 50 55 60

Gln Pro His Gly Tyr Asp Gln Pro Gly Thr Glu Pro Leu Asp Leu His 65 70 75 80

Asn Asn Gly His Thr Val Gln Leu Ser Leu Pro Ser Thr Leu Tyr Leu 85 90 95

Gly Gly Leu Pro Arg Lys Tyr Val Ala Ala Gln Leu His Leu His Trp 100 105 110

Gly Gln Lys Gly Ser Pro Gly Gly Ser Glu His Gln Ile Asn Ser Glu 115 120 125

Ala Thr Phe Ala Glu Leu His Ile Val His Tyr Asp Ser Asp Ser Tyr 130 135 140

Asp Ser Leu Ser Glu Ala Ala Glu Arg Pro Gln Gly Leu Ala Val Leu 145 150 155 160

Gly Ile Leu Ile Glu Leu Glu Lys Leu Gln Gly Thr Leu Phe Ser Thr 165 170 175

Glu Glu Glu Pro Ser Lys Leu Leu Val Gln Asn Tyr Arg Ala Leu Gln . 180 185 190

Pro Leu Asn Gln Arg Met Val Phe Ala Ser Phe Ile Gln Ala Gly Ser 195 200 205

Ser Tyr Thr Thr Gly Glu Met Leu Ser Leu Gly Val Gly Ile Leu Val 210 215 220

Gly Cys Leu Cys Leu Leu Leu Ala Val Tyr Phe Ile Ala Arg Lys Ile 225 230 235 240

Arg Lys Lys Arg Leu Glu Asn Arg Lys Ser Val Val Phe Thr Ser Ala 245 250 255

Gln Ala Thr Thr Glu Ala 260

<210> 931

<211> 399

<212> PRT

<213> Homo sapiens

<400> 931

Met Gly Ile Leu Leu Gly Leu Leu Leu Gly His Leu Thr Val Asp 1 5 10 15

Thr Tyr Gly Arg Pro Ile Leu Glu Val Pro Glu Ser Val Thr Gly Pro 20 25 30

Trp Lys Gly Asp Val Asn Leu Pro Cys Thr Tyr Asp Pro Leu Gln Gly 40 Tyr Thr Gln Val Leu Val Lys Trp Leu Val Gln Arg Gly Ser Asp Pro Val Thr Ile Phe Leu Arg Asp Ser Ser Gly Asp His Ile Gln Gln Ala Lys Tyr Gln Gly Arg Leu His Val Ser His Lys Val Pro Gly Asp Val Ser Leu Gln Leu Ser Thr Leu Glu Met Asp Asp Arg Ser His Tyr Thr 105 Cys Glu Val Thr Trp Gln Thr Pro Asp Gly Asn Gln Val Val Arg Asp 120 Lys Ile Thr Glu Leu Arg Val Gln Lys Leu Ser Val Ser Lys Pro Thr 135 Val Thr Thr Gly Ser Gly Tyr Gly Phe Thr Val Pro Gln Gly Met Arg 155 Ile Ser Leu Gln Cys Gln Ala Arg Gly Ser Pro Pro Ile Ser Tyr Ile 170 Trp Tyr Lys Gln Gln Thr Asn Asn Gln Glu Pro Ile Lys Val Ala Thr 185 Leu Ser Thr Leu Leu Phe Lys Pro Ala Val Ile Ala Asp Ser Gly Ser Tyr Phe Cys Thr Ala Lys Gly Gln Val Gly Ser Glu Gln His Ser Asp Ile Val Lys Phe Val Val Lys Asp Ser Ser Lys Leu Leu Lys Thr Lys 230 235 Thr Glu Ala Pro Thr Thr Met Thr Tyr Pro Leu Lys Ala Thr Ser Thr Val Lys Gln Ser Trp Asp Trp Thr Thr Asp Met Asp Gly Tyr Leu Gly Glu Thr Ser Ala Gly Pro Gly Lys Ser Leu Pro Val Phe Ala Ile Ile Leu Ile Ile Ser Leu Cys Cys Met Val Val Phe Thr Met Ala Tyr Ile Met Leu Cys Arg Lys Thr Ser Gln Gln Glu His Val Tyr Glu Ala Ala 310 315 Arg Ala His Ala Arg Glu Ala Asn Asp Ser Gly Glu Thr Met Arg Val Ala Ile Phe Ala Ser Gly Cys Ser Ser Asp Glu Pro Thr Ser Gln Asn Leu Gly Asn Asn Tyr Ser Asp Glu Pro Cys Ile Gly Gln Glu Tyr Gln

355 360 365

Ile Ile Ala Gln Ile Asn Gly Asn Tyr Ala Arg Leu Leu Asp Thr Val 370 380

Pro Leu Asp Tyr Glu Phe Leu Ala Thr Glu Gly Lys Ser Val Cys 385 390 395

<210> 932

<211> 122

<212> PRT

<213> Homo sapiens

<400> 932

Phe Ile Thr Leu Ile Phe Phe Leu Ala Trp Leu Val Lys Asn Val Phe 20 25 30 .

Ile Ala Val Ile Ile Glu Thr Phe Ala Glu Ile Arg Val Gln Phe Gln 35 40 45

Gln Met Trp Gly Ser Arg Ser Ser Thr Thr Ser Thr Ala Thr Thr Gln 50 60

Met Phe His Glu Asp Ala Ala Gly Gly Trp Gln Leu Val Ala Val Asp 65 70 . 75 80

Val Asn Lys Pro Gln Gly Arg Ala Pro Ala Cys Leu Gln Val Gln Tyr 85 90 95

Asn Asp Ile Phe Lys Asn Arg Pro Ala Lys Val Phe Glu Phe Tyr Phe 100 105 110

Ile Gln Glu Asn Pro Gln Leu Phe Lys Leu 115 120

<210> 933

<211> 223

<212> PRT

<213> Homo sapiens

<400> 933

Met Lys Phe Val Pro Cys Leu Leu Leu Val Thr Leu Ser Cys Leu Gly 1 5 10 15

Thr Leu Gly Gln Ala Pro Arg Gln Lys Gln Gly Ser Thr Gly Glu Glu 20 25 30

Phe His Phe Gln Thr Gly Gly Arg Asp Ser Cys Thr Met Arg Pro Ser 35 40 45

Ser Leu Gly Gln Gly Ala Gly Glu Val Trp Leu Arg Val Asp Cys Arg 50 55 60

Asn Thr Asp Gln Thr Tyr Trp Cys Glu Tyr Arg Gly Gln Pro Ser Met

75

Cys Gln Ala Phe Ala Ala Asp Pro Lys Ser Tyr Trp Asn Gln Ala Leu 85 90 95

70

Gln Glu Leu Arg Arg Leu His His Ala Cys Gln Gly Ala Pro Val Leu

Arg Pro Ser Val Cys Arg Glu Ala Gly Pro Gln Ala His Met Gln Gln 115 120 125

Val Thr Ser Ser Leu Lys Gly Ser Pro Glu Pro Asn Gln Gln Pro Glu 130 135 140

Ala Gly Thr Pro Ser Leu Arg Pro Lys Ala Thr Val Lys Leu Thr Glu 145 150 155 160

Ala Thr Gln Leu Gly Lys Asp Ser Met Glu Glu Leu Gly Lys Ala Lys 165 170 175

Pro Thr Thr Arg Pro Thr Ala Lys Pro Thr Gln Pro Gly Pro Arg Pro 180 185 190

Gly Gly Asn Glu Glu Ala Lys Lys Lys Ala Trp Glu His Cys Trp Lys 195  $\cdot$  200 205

Pro Phe Gln Ala Leu Cys Ala Phe Leu Ile Ser Phe Phe Arg Gly 210 215 220

<210> 934

65

<211> 70

<212> PRT

<213> Homo sapiens

<400> 934

Met Leu Phe Trp Lys Phe Gly Ser Phe Leu Phe Phe Cys Leu Pro Leu 1 5 10 15

Thr Leu Phe Cys Ile Leu Asn Glu Arg Gly Ile Met His Leu Glu Gly 20 25 30

Gly Thr Leu Leu Asn Ser Leu Ser His Val Arg His Tyr Leu Arg Leu 35 40 45

Arg Leu Ser Cys Phe Glu Lys Ile Pro Leu His Arg Ser Ile Phe Ile 50 55

Phe Leu Leu Leu Leu 65 70

<210> 935

<211> 152

<212> PRT

<213> Homo sapiens

<400> 935

Met Leu Val Val Cys Leu Leu Leu Ala Thr Gly Phe Cys Leu Phe Arg

1 5 10 15

Gly Leu Ile Ala Leu Asp Cys Pro Ser Glu Leu Cys Arg Leu Tyr Thr 20 25 30

Gln Phe Gln Glu Pro Tyr Leu Lys Asp Pro Ala Ala Tyr Pro Lys Ile  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gln Met Leu Ala Tyr Met Phe Tyr Ser Val Pro Tyr Phe Val Thr Ala 50 60

Leu Tyr Gly Leu Val Val Pro Gly Cys Ser Trp Met Pro Asp Ile Thr 65 70 75 80

Leu Ile His Ala Gly Gly Leu Ala Gln Ala Gln Phe Ser His Ile Gly
85 90 95

Ala Ser Leu His Ala Arg Thr Ala Tyr Val Tyr Arg Val Pro Glu Glu 100 105 110

Ala Lys Ile Leu Phe Leu Ala Leu Asn Ile Ala Tyr Gly Val Leu Pro 115 120 125

Gln Leu Leu Ala Tyr Arg Cys Ile Tyr Lys Pro Glu Phe Phe Ile Lys 130 135 140

Thr Lys Ala Glu Glu Lys Val Glu 145 150

<210> 936

<211> 217

<212> PRT

<213> Homo sapiens

<400> 936

Met Ala Ser Lys Met Lys Asp Thr Gly Phe Ile Val Phe Ala Val Leu
1 5 10

Leu Leu Val Ser Cys Leu Ile Leu Ile Phe Val Ile Ala Pro Arg Tyr
20 25 30

Gly Gln Arg Asn Ile Leu Ile Tyr Ile Ile Ile Cys Ser Val Ile Gly  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ala Phe Ser Val Ala Ala Val Lys Gly Leu Gly Ile Thr Ile Lys Asn 50 55 60

Phe Phe Gln Gly Leu Pro Val Val Arg His Pro Leu Pro Tyr Ile Leu 65 70 75 80

Ser Leu Ile Leu Ala Leu Ser Leu Ser Thr Gln Val Asn Phe Leu Asn 90 95

Arg Ala Leu Asp Ile Phe Asn Thr Ser Leu Val Phe Pro Ile Tyr Tyr 100 105 110

Val Phe Phe Thr Thr Val Val Val Thr Ser Ser Ile Ile Leu Phe Lys 115 120 125

Glu Trp Tyr Ser Met Ser Ala Val Asp Ile Ala Gly Thr Leu Ser Gly 130 135 140

Phe Val Thr Ile Ile Leu Gly Val Phe Met Leu His Ala Phe Lys Asp 145 150 155 160

Leu Asp Ile Ser Cys Ala Ser Leu Pro His Met His Lys Asn Pro Pro 165 170 175

Pro Ser Pro Ala Pro Glu Pro Thr Val Ile Arg Leu Glu Asp Lys Asn 180 185 190

Val Leu Val Asp Asn Ile Glu Leu Ala Ser Thr Ser Ser Pro Glu Glu 195 200 205

Lys Pro Lys Val Phe Ile Ile His Ser 210 215

<210> 937

<211> 135

<212> PRT

<213> Homo sapiens

<400> 937

Met Gly Leu Trp Leu Gly Met Leu Ala Cys Val Phe Leu Ala Thr Ala 1 5 10 15

Ala Phe Val Ala Tyr Thr Ala Arg Leu Asp Trp Lys Leu Ala Ala Glu 20 25 30

Glu Ala Lys Lys His Ser Gly Arg Gln Gln Gln Arg Ala Glu Ser 40 45

Thr Ala Thr Arg Pro Gly Pro Glu Lys Ala Val Leu Ser Ser Val Ala 50 55 60

Thr Gly Ser Ser Pro Gly Ile Thr Leu Thr Thr Tyr Ser Arg Ser Glu 65 70 75 80

Cys His Val Asp Phe Phe Arg Thr Pro Glu Glu Ala His Ala Leu Ser 85 90 95

Ala Pro Thr Ser Arg Leu Ser Val Lys Gln Leu Val Ile Arg Arg Gly 100 105 110

Ala Ala Leu Gly Ala Ala Ser Ala Thr Leu Met Val Gly Leu Thr Val 115 120 125

Arg Ile Leu Ala Thr Arg His 130 135

<210> 938

<211> 181

<212> PRT

<213> Homo sapiens

<400> 938

PCT/US02/08277 WO 03/038063

Met Thr Val Ile Leu Ile Leu Ile Val Val Met Ala Arg Tyr Cys 10 Arg Ser Lys Asn Lys Asn Gly Tyr Glu Ala Gly Lys Lys Asp His Glu Asp Phe Phe Thr Pro Gln Gln His Asp Lys Ser Lys Lys Pro Lys Lys Asp Lys Lys Asn Lys Lys Ser Lys Gln Pro Leu Tyr Ser Ser Ile Val Thr Val Glu Ala Ser Lys Pro Asn Gly Gln Arg Tyr Asp Ser Val Asn Glu Lys Leu Ser Asp Ser Pro Ser Met Gly Arg Tyr Arg Ser Val Asn Gly Gly Pro Gly Ser Pro Asp Leu Ala Arg His Tyr Lys Ser Ser Ser

Pro Leu Pro Thr Val Gln Leu His Pro Gln Ser Pro Thr Ala Gly Lys 120

Lys His Gln Ala Val Gln Asp Leu Pro Pro Ala Asn Thr Phe Val Gly

Ala Gly Asp Asn Ile Ser Ile Gly Ser Asp His Cys Ser Glu Tyr Ser 150 155

Cys Gln Thr Asn Asn Lys Tyr Ser Lys Gln Met Arg Leu His Pro Tyr 170

Ile Thr Val Phe Gly 180

<210> 939 <211> 9 <212> PRT <213> Homo sapiens <400> 939

Met Ser Leu Gln Ser Arg Gly Ser Asn

<210> 940 <211> 256 <212> PRT <213> Homo sapiens

<400> 940 Met Val Ile Ser Ile Phe Phe Ser Leu Pro Phe Ser Thr Ser Ala Tyr

Thr Leu Ile Ala Pro Asn Ile Asn Arg Arg Asn Glu Ile Gln Arg Ile

Ala Glu Gln Glu Leu Ala Asn Leu Glu Lys Trp Lys Glu Gln Asn Arg Ala Lys Pro Val His Leu Val Pro Arg Arg Leu Gly Gly Ser Gln Ser Glu Thr Glu Val Arg Gln Lys Gln Gln Leu Gln Leu Met Gln Ser Lys Tyr Lys Gln Lys Leu Lys Arg Glu Glu Ser Val Arg Ile Lys Lys Glu Ala Glu Glu Ala Glu Leu Gln Lys Met Lys Ala Ile Gln Arg Glu Lys 105 Ser Asn Lys Leu Glu Glu Lys Lys Arg Leu Gln Glu Asn Leu Arg Arg 115 120 Glu Ala Phe Arg Glu His Gln Gln Tyr Lys Thr Ala Glu Phe Leu Ser Lys Leu Asn Thr Glu Ser Pro Asp Arg Ser Ala Cys Gln Ser Ala Val Cys Gly Pro Gln Ser Ser Thr Trp Ala Arg Ser Trp Ala Tyr Arg Asp 170 Ser Leu Lys Ala Glu Glu Asn Arg Lys Leu Gln Lys Met Lys Asp Glu Gln His Gln Lys Ser Glu Leu Leu Glu Leu Lys Arg Gln Gln Gln Glu 200 Gln Glu Arg Ala Lys Ile His Gln Thr Glu His Arg Arg Val Asn Asn Ala Phe Leu Asp Arg Leu Gln Gly Lys Ser Gln Pro Gly Gly Leu Glu 235

<210> 941 <211> 58 <212> PRT

<213> Homo sapiens

<400> 941

Met Arg Thr Phe Leu Thr Phe Val Ile Leu Lys Val Ile Leu Ile Phe 1 5 10 15

Gln Ser Gly Gly Cys Trp Asn Met Asn Ser Gly Asn Ser Trp Gly Ile

250

Leu Ser Ser Cys Ala Ser Phe Thr Arg Asn Leu Leu Thr Trp Pro Asn 20 25 30

Asp Val Ser Thr Glu Gln Phe Glu Thr Arg Pro Phe Gly Ser Glu Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45 \hspace{1.5cm}$ 

Leu Gln Thr Val Ile Asn Val Ser Arg Thr 50 55

<210> 942

<211> 286

<212> PRT

<213> Homo sapiens

<400> 942

Met Ala Met Glu Gly Tyr Trp Arg Phe Leu Ala Leu Leu Gly Ser Ala 1 5 10 15

Leu Leu Val Gly Phe Leu Ser Val Ile Phe Ala Leu Val Trp Val Leu 20 25 30

His Tyr Arg Glu Gly Leu Gly Trp Asp Gly Ser Ala Leu Glu Phe Asn 35 40 45

Trp His Pro Val Leu Met Val Thr Gly Phe Val Phe Ile Gln Gly Ile 50 55 60

Ala Ile Ile Val Tyr Arg Leu Pro Trp Thr Trp Lys Cys Ser Lys Leu 65 70 75 80

Leu Met Lys Ser Ile His Ala Gly Leu Asn Ala Val Ala Ala Ile Leu  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Ile Ile Ser Val Val Ala Val Phe Glu Asn His Asn Val Asn Asn
100 105 110

Ile Ala Asn Met Tyr Ser Leu His Ser Trp Val Gly Leu Ile Ala Val 115 120 125

Ile Cys Tyr Leu Leu Gln Leu Leu Ser Gly Phe Ser Val Phe Leu Leu 130 135 140

Pro Trp Ala Pro Leu Ser Leu Arg Ala Phe Leu Met Pro Ile His Val 145 150 155 160

Tyr Ser Gly Ile Val Ile Phe Gly Thr Val Ile Ala Thr Ala Leu Met 165 170 175

Gly Leu Thr Glu Lys Leu Ile Phe Ser Leu Arg Asp Pro Ala Tyr Ser 180 185 190

Thr Phe Pro Pro Glu Gly Val Phe Val Asn Thr Leu Gly Leu Leu Ile 195 200 205

Leu Val Phe Gly Ala Leu Ile Phe Trp Ile Val Thr Arg Pro Gln Trp 210 215 220

Lys Arg Pro Lys Glu Pro Asn Ser Thr Ile Leu His Pro Asn Gly Gly 225 230 235 240

Thr Glu Gln Gly Ala Arg Gly Ser Met Pro Ala Tyr Ser Gly Asn Asn 245 250 255

Met Asp Lys Ser Asp Ser Glu Leu Asn Ser Glu Val Ala Ala Arg Lys

260 265 270

Arg Asn Leu Ala Leu Asp Glu Ala Gly Gln Arg Ser Thr Met 275 280 285

<210> 943

<211> 950

<212> PRT

<213> Homo sapiens

<400> 943

Met Thr Trp Arg Met Gly Pro Arg Phe Thr Met Leu Leu Ala Met Trp 1 5 10 15

Leu Val Cys Gly Ser Glu Pro His Pro His Ala Thr Ile Arg Gly Ser 20 25 30

His Gly Gly Arg Lys Val Pro Leu Val Ser Pro Asp Ser Ser Arg Pro
35 40 45

Ala Arg Phe Leu Arg His Thr Gly Arg Ser Arg Gly Ile Glu Arg Ser 50 55 60

Thr Leu Glu Glu Pro Asn Leu Gln Pro Leu Gln Arg Arg Ser Val
65 70 75 80

Ile Asn Gly Ala Ala Val Arg Pro Glu Gln Arg Pro Ala Ala Arg Gly
100 105 110

Ser Pro Arg Glu Met Ile Arg Asp Glu Gly Ser Ser Ala Arg Ser Arg 115 120 125

Met Leu Arg Phe Pro Ser Gly Ser Ser Ser Pro Asn Ile Leu Ala Ser 130 135 140

Phe Ala Gly Lys Asn Arg Val Trp Val Ile Ser Ala Pro His Ala Ser 145 150 155 160

Glu Gly Tyr Tyr Arg Leu Met Met Ser Leu Leu Lys Asp Asp Val Tyr 165 170 175

Cys Glu Leu Ala Glu Arg His Ile Gln Gln Ile Val Leu Phe His Gln 180 185 190

Ala Gly Glu Glu Gly Gly Lys Val Arg Arg Ile Thr Ser Glu Gly Gln
195 200 205

Ile Leu Glu Gln Pro Leu Asp Pro Ser Leu Ile Pro Lys Leu Met Ser 210 215 220

Phe Leu Lys Leu Glu Lys Gly Lys Phe Gly Met Val Leu Leu Lys Lys 225 230 235 240

Thr Leu Gln Val Glu Glu Arg Tyr Pro Tyr Pro Val Arg Leu Glu Ala 245 250 255

Met Tyr Glu Val Ile Asp Gln Gly Pro Ile Arg Arg Ile Glu Lys Ile Arg Gln Lys Gly Phe Val Gln Lys Cys Lys Ala Ser Gly Val Glu Gly Gln Val Val Ala Glu Gly Asn Asp Gly Gly Gly Gly Ala Gly Arg Pro Ser Leu Gly Ser Glu Lys Lys Lys Glu Asp Pro Arg Arg Ala Gln Val Pro Pro Thr Arg Glu Ser Arg Val Lys Val Leu Arg Lys Leu Ala Ala 325 330 Thr Ala Pro Ala Leu Pro Gln Pro Pro Ser Thr Pro Arg Ala Thr Thr Leu Pro Pro Ala Pro Ala Thr Thr Val Thr Arg Ser Thr Ser Arg Ala 360 Val Thr Val Ala Ala Arg Pro Met Thr Thr Thr Ala Phe Pro Thr Thr Gln Arg Pro Trp Thr Pro Ser Pro Ser His Arg Pro Pro Thr Thr Thr 390 395 Glu Val Ile Thr Ala Arg Arg Pro Ser Val Ser Glu Asn Leu Tyr Pro Pro Ser Arg Lys Asp Gln His Arg Glu Arg Pro Gln Thr Thr Arg Arg Pro Ser Lys Ala Thr Ser Leu Glu Ser Phe Thr Asn Ala Pro Pro Thr 440 Thr Ile Ser Glu Pro Ser Thr Arg Ala Ala Gly Pro Gly Arg Phe Arg 455 Asp Asn Arg Met Asp Arg Arg Glu His Gly His Arg Asp Pro Asn Val 465 Val Pro Gly Pro Pro Lys Pro Ala Lys Glu Lys Pro Pro Lys Lys Ala Gln Asp Lys Ile Leu Ser Asn Glu Tyr Glu Glu Lys Tyr Asp Leu 505 Ser Arg Pro Thr Ala Ser Gln Leu Glu Asp Glu Leu Gln Val Gly Asn 520 Val Pro Leu Lys Lys Ala Lys Glu Ser Lys Lys His Glu Lys Leu Glu Lys Pro Glu Lys Glu Lys Lys Lys Met Lys Asn Glu Asn Ala Asp Lys Leu Leu Lys Ser Glu Lys Gln Met Lys Lys Ser Glu Lys Lys Ser

Lys Gln Glu Lys Glu Lys Ser Lys Lys Lys Gly Gly Lys Thr Glu Gln Asp Gly Tyr Gln Lys Pro Thr Asn Lys His Phe Thr Gln Ser Pro Lys Lys Ser Val Ala Asp Leu Leu Gly Ser Phe Glu Gly Lys Arg Arg Leu Leu Ile Thr Ala Pro Lys Ala Glu Asn Asn Met Tyr Val Gln Gln Arg Asp Glu Tyr Leu Glu Ser Phe Cys Lys Met Ala Thr Arg Lys 650 Ile Ser Val Ile Thr Ile Phe Gly Pro Val Asn Asn Ser Thr Met Lys 665 Ile Asp His Phe Gln Leu Asp Asn Glu Lys Pro Met Arg Val Val Asp 680 Asp Glu Asp Leu Val Asp Gln Arg Leu Ile Ser Glu Leu Arg Lys Glu Tyr Gly Met Thr Tyr Asn Asp Phe Phe Met Val Leu Thr Asp Val Asp 710 715 Leu Arg Val Lys Gln Tyr Tyr Glu Val Pro Ile Thr Met Lys Ser Val 730 Phe Asp Leu Ile Asp Thr Phe Gln Ser Arg Ile Lys Asp Met Glu Lys Gln Lys Lys Glu Gly Ile Val Cys Lys Glu Asp Lys Lys Gln Ser Leu Glu Asn Phe Leu Ser Arg Phe Arg Trp Arg Arg Arg Leu Leu Val Ile 775 Ser Ala Pro Asn Asp Glu Asp Trp Ala Tyr Ser Gln Gln Leu Ser Ala Leu Ser Gly Gln Ala Cys Asn Phe Gly Leu Arg His Ile Thr Ile Leu 805 Lys Leu Gly Val Gly Glu Glu Val Gly Val Leu Glu Leu Phe Pro Ile Asn Gly Ser Ser Val Val Glu Arg Glu Asp Val Pro Ala His 840 Leu Val Lys Asp Ile Arg Asn Tyr Phe Gln Val Ser Pro Glu Tyr Phe Ser Met Leu Val Gly Lys Asp Gly Asn Val Lys Ser Trp Tyr Pro Ser Pro Met Trp Ser Met Val Ile Val Tyr Asp Leu Ile Asp Ser Met Gln Leu Arg Arg Gln Glu Met Ala Ile Gln Gln Ser Leu Gly Met Arg

900 905 910

Cys Pro Glu Asp Glu Tyr Ala Gly Tyr Gly Tyr His Ser Tyr His Gln 915 920 925

Gly Tyr Gln Asp Gly Tyr Gln Asp Asp Tyr Arg His His Glu Ser Tyr 930 935 940

His His Gly Tyr Pro Tyr 945 950

<210> 944

<211> 260

<212> PRT

<213> Homo sapiens

<400> 944

Met Leu Ala Leu Leu Gly Leu Ser Gln Ala Leu Asn Ile Leu Leu Gly
1 5 10 15

Leu Lys Gly Leu Ala Pro Ala Glu Ile Ser Ala Val Cys Glu Lys Gly 20 25 30

Asn Phe Asn Val Ala His Gly Leu Ala Trp Ser Tyr Tyr Ile Gly Tyr 35 40 45

Leu Arg Leu Ile Leu Pro Glu Leu Gln Ala Arg Ile Arg Thr Tyr Asn 50 60

Gln His Tyr Asn Asn Leu Leu Arg Gly Ala Val Ser Gln Arg Leu Tyr 65 70 75 80

Ile Leu Leu Pro Leu Asp Cys Gly Val Pro Asp Asn Leu Ser Met Ala 85 90 95

Asp Pro Asn Ile Arg Phe Leu Asp Lys Leu Pro Gln Gln Thr Gly Asp 100 105 110

Arg Ala Gly Ile Lys Asp Arg Val Tyr Ser Asn Ser Ile Tyr Glu Leu 115 120 125

Leu Glu Asn Gly Gln Arg Ala Gly Thr Cys Val Leu Glu Tyr Ala Thr 130 135 140

Pro Leu Gln Thr Leu Phe Ala Met Ser Gln Tyr Ser Gln Ala Gly Phe 145 150 155 160

Ser Gly Glu Asp Arg Leu Glu Gln Ala Lys Leu Phe Cys Arg Thr Leu 165 170 175

Glu Asp Ile Leu Ala Asp Ala Pro Glu Ser Gln Asn Asn Cys Arg Leu 180 185 190

Ile Ala Tyr Gln Glu Pro Ala Asp Asp Ser Ser Phe Ser Leu Ser Gln
195 200 205

Glu Val Leu Arg His Leu Arg Gln Glu Glu Lys Glu Glu Val Thr Val 210 215 220

Gly Ser Leu Lys Thr Ser Ala Val Pro Ser Thr Ser Thr Met Ser Gln 225 230 235 240

Glu Pro Glu Leu Leu Ile Ser Gly Met Glu Lys Pro Leu Pro Leu Arg 245 250 255

Thr Asp Phe Ser 260

<210> 945

<211> 247

<212> PRT

<213> Homo sapiens

<400> 945

Met His Leu Ala Arg Leu Val Gly Ser Cys Ser Leu Leu Leu Leu Leu 1 5 10 15

Gly Ala Leu Ser Gly Trp Ala Ala Ser Asp Asp Pro Ile Glu Lys Val 20 25 30

Ile Glu Gly Ile Asn Arg Gly Leu Ser Asn Ala Glu Arg Glu Val Gly 35 40 45

Lys Ala Leu Asp Gly Ile Asn Ser Gly Ile Thr His Ala Gly Arg Glu 50 60

Val Glu Lys Val Phe Asn Gly Leu Ser Asn Met Gly Ser His Thr Gly 65 70 75 80

Lys Glu Leu Asp Lys Gly Val Gln Gly Leu Asn His Gly Met Asp Lys  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Val Ala His Glu Ile Asn His Gly Ile Gly Gln Ala Gly Lys Glu Ala 100 105 110

Glu Lys Leu Gly His Gly Val Asn Asn Ala Ala Gly Gln Ala Gly Lys 115 120 125

Glu Ala Asp Lys Ala Val Gln Gly Phe His Thr Gly Val His Gln Ala 130 \$135\$

Gly Lys Glu Ala Glu Lys Leu Gly Gln Gly Val Asn His Ala Ala Asp 155 150 155 160

Gln Ala Gly Lys Glu Val Glu Lys Leu Gly Gln Gly Ala His His Ala 165 170 175

Ala Gly Gln Ala Gly Lys Glu Leu Gln Asn Ala His Asn Gly Val Asn 180 185 190

Gln Ala Ser Lys Glu Ala Asn Gln Leu Leu Asn Gly Asn His Gln Ser 195 200 205

Gly Ser Ser Ser His Gln Gly Gly Ala Thr Thr Pro Leu Ala Ser 210 215 220

Gly Ala Ser Val Asn Thr Pro Phe Ile Asn Leu Pro Ala Leu Trp Arg 225 230 235 240

Ser Val Ala Asn Ile Met Pro 245

<210> 946

<211> 42

<212> PRT

<213> Homo sapiens

<400> 946

Met Phe Thr Leu Leu Leu Ser Ser Phe Phe Leu Gln His Cys Leu Gln 1 5 10 15

Asn Asn Leu Tyr Ala Ser Glu Arg Glu Gln Ile Phe Ser Asn Phe Leu  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Gln Leu Ser Ser Leu Lys Arg Arg Ile Cys

<210> 947

<211> 35

<212> PRT

<213> Homo sapiens

<400> 947

Met Pro Leu Pro Ser Ser Phe Pro Leu Pro Val Phe Leu Ser Ser Cys 1 5 10 15

Pro Phe Leu Met Ser Val Ser Ile Gly Phe Leu Ile Leu Val Phe Asn 20 25 30

Val His Pro 35

<210> 948

<211> 55

<212> PRT

<213> Homo sapiens

<400> 948

Met Val Asn Ile Phe Gly Phe Val Ser Cys Ile Val Phe Arg Cys Ser 1 5 10 15

Cys Ser Ala Leu Leu His Glu Ser Asn His Arg Pro Tyr Leu Asn Lys 20 25 30

Trp Ser Leu Leu Ser Thr Asn Lys Thr Leu Phe Arg Asn Asn Arg Gly 35 40 45

Leu Asp Leu Val Leu Val Cys 50 55

<210> 949

<211> 62

<212> PRT

<213> Homo sapiens

<400> 949

Met Glu Pro Glu Ser Trp Ala Leu Cys Leu Leu Leu Phe Leu Gly Thr 1 5 10 15

Ala Leu Gly Tyr Pro Pro Leu Pro Arg His Ser Ser Lys Cys Glu Ile  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Leu Glu Val Arg Leu His Leu Leu Pro Leu Leu Ile Asn Ile Gly Met \$35\$ \$40\$

Met Ser Pro Val Ala Ser Pro Phe Val Cys Ser Ile Thr Gly 50 55 60

<210> 950

<211> 218

<212> PRT

<213> Homo sapien's

<400> 950

Met His Phe Leu Phe Arg Phe Ile Val Phe Phe Tyr Leu Trp Gly Leu 1 5 10 15

Phe Thr Ala Gln Arg Gln Lys Lys Glu Glu Ser Thr Glu Glu Val Lys
20 25 30

Ile Glu Val Leu His Arg Pro Glu Asn Cys Ser Lys Thr Ser Lys Lys 35 40 45

Gly Asp Leu Leu Asn Ala His Tyr Asp Gly Tyr Leu Ala Lys Asp Gly
50 60

Ser Lys Phe Tyr Cys Ser Arg Thr Gln Asn Glu Gly His Pro Lys Trp 65 70 75 80

Phe Val Leu Gly Val Gly Gln Val Ile Lys Gly Leu Asp Ile Ala Met 85 90 95

Thr Asp Met Cys Pro Gly Glu Lys Arg Lys Val Val Ile Pro Pro Ser 100 105 110

Phe Ala Tyr Gly Lys Glu Gly Tyr Ala Glu Gly Lys Ile Pro Pro Asp 115 120 125

Ala Thr Leu Ile Phe Glu Ile Glu Leu Tyr Ala Val Thr Lys Gly Pro 130 140

Arg Ser Ile Glu Thr Phe Lys Gln Ile Asp Met Asp Asn Asp Arg Gln 145 150 155 160

Leu Ser Lys Ala Glu Ile Asn Leu Tyr Leu Gln Arg Glu Phe Glu Lys 165 170 175

Asp Glu Lys Pro Arg Asp Lys Ser Tyr Gln Asp Ala Val Leu Glu Asp 180 185 190

Ile Phe Lys Lys Asn Asp His Asp Gly Asp Gly Phe Ile Ser Pro Lys
195 200 205

Glu Tyr Asn Val Tyr Gln His Asp Glu Leu 210 215

<210> 951

<211> 78

<212> PRT

<213> Homo sapiens

<400> 951

Met Val Cys Phe Gln Ser Asn Lys Pro Ser Thr Ser Thr Trp Arg Gln  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Leu Ser Phe Val Phe Val Leu Phe Cys Leu Phe Cys Leu Gly His Ala
20 25 30

Phe Leu Ser Leu Pro Phe Tyr Ile Leu Ser Ile Ile Ala Met Cys Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Glu Gln Trp Ala Phe His Asn Met Asn Ser Leu Tyr His His Glu Trp 50 55 60

Glu Val Arg Gly Asn Leu Ile His Val Asp Phe Thr Leu Pro 65 70 75

<210> 952

<211> 41

<212> PRT

<213> Homo sapiens

<400> 952

Met Asn Leu Met Val Arg Leu Leu Ala Leu Gly Leu Ile Ser Gly Met 1 5 10 15

Met Ser Asn Ile Thr Gln Ser His Ser Ser Lys Ile Ser Ala Phe Gly 20 25 30

Ile Phe Ile Gly Pro Glu Gln Phe Leu

<210> 953

<211> 606

<212> PRT

<213> Homo sapiens

<400> 953

Met Thr Val Val Gly Asn Pro Arg Ser Trp Ser Cys Gln Trp Leu Pro

Ile Leu Ile Leu Leu Gly Thr Gly His Gly Pro Gly Val Glu Gly 20  $\phantom{000}25\phantom{000}$  25

Val Thr His Tyr Lys Ala Gly Asp Pro Val Ile Leu Tyr Val Asn Lys

		35					40					45			
Val	Gly 50	Pro	Tyr	His	Asn	Pro 55	Gln	Glu	Thr	Tyr	His 60	Tyr	Tyr	Gln	Leu
Pro 65	Val	Cys	Суз	Pro	Glu 70	Lys	Ile	Arg	His	Lys 75	Ser	Leu	Ser	Leu	Gly 80
Glu	Val	Leu	qzA	Gly 85	Asp	Arg	Met	Ala	Glu 90	Ser	Leu	Tyr	Glu	Ile 95	Arg
Phe	Arg	Glu	Asn 100	Val	Glu	Lys	Arg	Ile 105	Leu	Cys	His	Met	Gln 110	Leu	Ser
Ser	Ala	Gln 115	Val	Glu	Gln	Leu	Arg 120	Gln	Ala	Ile	Glu	Glu 125	Leu	Tyr	Tyr
Phe	Glu 130	Phe	Val	Val	Asp	Asp 135	Leu	Pro	Ile	Arg	Gly 140	Phe	Val	Gly	Tyr
Met 145	Glu	Glu	Ser	Gly	Phe 150	Leu	Pro	His	Ser	His 155	Lys	Ile	Gly	Leu	Trp 160
Thr	His	Leu	Asp	Phe 165	His	Leu	Glu	Phe	His 170	Gly	Asp	Arg	Ile	Ile 175	Phe
Ala	Asn	Val	Ser 180	Val	Arg	Asp	Val	Lys 185	Pro	His	Ser	Leu	Asp 190	Gly	Leu
Arg	Pro	Asp 195	Glu	Phe	Leu	Gly	Leu 200	Thr	His	Thr	Tyr	Ser 205	Val	Arg	Trp
Ser	Glu 210	Thr	Ser	Val	Glu	Arg 215	Arg	Ser	Asp	Arg	Arg 220	Arg	Gly	Asp	Asp
Gly 225	Gly	Phe	Phe	Pro	Arg 230	Thr	Leu	Glu	Ile	His 235	Trp	Leu	Ser	Ile	Ile 240
Asn	Ser	Met	Val	Leu 245	Val	Phe	Leu	Leu	Val 250	Gly	Phe	Val	Ala	Val 255	Ile
Leu	Met	Arg	Val 260	Leu	Arg	Asn	Asp	Leu 265	Ala	Arg	Tyr	Asn	Leu 270	Asp	Glu
Glu	Thr	Thr 275	Ser	Ala	Gly	Ser	Gly 280	Asp	Asp	Phe	Asp	Gln 285	Gly	Asp	Asn
Gly	Trp 290	Lys	Ile	Ile	His	Thr 295	Asp	Val	Phe	Arg	Phe 300	Pro	Pro	Tyr	Arg
Gly 305	Leu	Leu	Суѕ	Ala	Val 310	Leu	Gly	Val	Gly	Ala 315	Gln	Phe	Leu	Ala	Leu 320
Gly	Thr	Gly	Ile	Ile 325	Val	Met	Ala	Leu	Leu 330	Gly	Met	Phe	Asn	Val 335	His
Arg	His	Gly	Ala 340	Ile	Asn	Ser	Ala	Ala 345	Ile	Leu	Leu	Tyr	Ala 350	Leu	Thr
Cys	Cys	Ile 355	Ser	Gly	Tyr	Val	Ser 360	Ser	His	Phe	Tyr	Arg 365	Gln	Ile	Gly

Gly Glu Arg Trp Val Trp Asn Ile Ile Leu Thr Thr Ser Leu Phe Ser

Val Pro Phe Phe Leu Thr Trp Ser Val Val Asn Ser Val His Trp Ala 390 395 Asn Gly Ser Thr Gln Ala Leu Pro Ala Thr Thr Ile Leu Leu Leu Thr Val Trp Leu Leu Val Gly Phe Pro Leu Thr Val Ile Gly Gly Ile 425 Phe Gly Lys Asn Asn Ala Ser Pro Phe Asp Ala Pro Cys Arg Thr Lys 440 435 Asn Ile Ala Arg Glu Ile Pro Pro Gln Pro Trp Tyr Lys Ser Thr Val Ile His Met Thr Val Gly Gly Phe Leu Pro Phe Ser Ala Ile Ser Val 475 Glu Leu Tyr Tyr Ile Phe Ala Thr Val Trp Gly Arg Glu Gln Tyr Thr Leu Tyr Gly Ile Leu Phe Phe Val Phe Ala Ile Leu Leu Ser Val Gly 500 505 Ala Cys Ile Ser Ile Ala Leu Thr Tyr Phe Gln Leu Ser Gly Glu Asp Tyr Arg Trp Trp Arg Ser Val Leu Ser Val Gly Ser Thr Gly Leu Phe Ile Phe Leu Tyr Ser Val Phe Tyr Tyr Ala Arg Arg Ser Asn Met 545 550 555 Ser Gly Ala Val Gln Thr Val Glu Phe Phe Gly Tyr Ser Leu Leu Thr 570 Gly Tyr Val Phe Phe Leu Met Leu Gly Thr Ile Ser Phe Phe Ser Ser 585 Leu Lys Phe Ile Arg Tyr Ile Tyr Val Asn Leu Lys Met Asp 600 <210> 954 <211> 56 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (32) <223> Xaa equals any amino acid <400> 954

10

Met Leu Ser Phe Phe Ile Cys Leu Leu Ile Phe Val His Leu Leu

5

Leu Ser Phe Leu Ile Ser Asp Trp Pro Pro Pro Thr Gly Ser Ala Xaa 20 25 30

His Lys Ile Leu Arg Leu Met Val Val Gln Arg Leu Ser Leu Leu Asp 35 40 45

Gln Arg Lys Arg Trp Ser Glu Ala
50 55

<210> 955

<211> 88

<212> PRT

<213> Homo sapiens

<400> 955

Met Leu Phe Leu Ser Ala Ser Ile Cys Thr Ser Ala Leu Phe Leu Cys

1 10 15

Leu Ser Arg Leu Thr Ile Ser Ala Pro His Pro Ala Trp Trp Gly Arg
20 25 30

Met Pro Thr His Thr Ser Pro Gly His Leu Leu Glu Leu Gln Pro Arg
35 40 45

Gly Met Thr Glu Ser Ile Leu Phe Ser Ile Ser Ala Leu Val Ser Asn 50 60

Ser Trp Gly Lys Met Thr Gln Leu Thr Ser Gly Ser His Ser Trp Ser 65. 70 75 80

Ser Gly Leu Gln Asn Phe Gln Ala

<210> 956

<211> 90

<212> PRT

<213> Homo sapiens

<400> 956

Met Ala Ile Arg Leu Val Phe Leu Ala Leu Ala Gly Leu Val Asp Gly 1 5 10 15

Lys Pro Val Trp Ile Thr Leu Trp Met Asp Ala Lys Arg Pro Asn Leu 20 25 30

Ala Gly Thr Gly Ser Thr Trp Gly Ser Arg Arg Asp Ser His Cys Cys 35 40 45

His Gly Pro Thr Ala Trp Ser Leu Pro Cys Leu Leu Cys Leu Phe Arg 50 55 60

Ala Gln Gln Lys Asp Arg Glu Arg Ser Leu Leu Gly Val Pro Leu Pro 65 70 75 80

Thr Leu Gln Gly Gly Asn Leu Ser Asp Gly 85 90

<210> 957

<211> 45

<212> PRT

<213> Homo sapiens

<400> 957

Met Arg Pro Val Cys Ser Leu Gly Trp Ala Gly Trp Pro Gly Leu Val 1 5 10 15

Cys Gly Leu Arg Ala Leu Leu Gly Pro Ser Leu Phe Pro Val Thr Phe  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Gly Ala Thr Glu Ala Val His Ser Leu Asp Val Cys Ser 35 40 45

<210> 958

<211> 305

<212> PRT

<213> Homo sapiens

<400> 958

Met Ala Ala Gly Leu Ala Arg Leu Leu Leu Leu Gly Leu Ser Ala 1 5 10 15

Gly Gly Pro Ala Pro Ala Gly Ala Ala Lys Met Lys Val Val Glu Glu 20 25 30

Pro Asn Ala Phe Gly Val Asn Asn Pro Phe Leu Pro Gln Ala Ser Arg 35 40 45

Leu Gln Ala Lys Arg Asp Pro Ser Pro Val Ser Gly Pro Val His Leu 50 60

Phe Arg Leu Ser Gly Lys Cys Phe Ser Leu Val Glu Ser Thr Tyr Lys 65 70 75 80

Tyr Glu Phe Cys Pro Phe His Asn Val Thr Gln His Glu Gln Thr Phe 85 90 95

Arg Trp Asn Ala Tyr Ser Gly Ile Leu Gly Ile Trp His Glu Trp Glu
100 105 110

Ile Ala Asn Asn Thr Phe Thr Gly Met Trp Met Arg Asp Gly Asp Ala 115 120 125

Cys Arg Ser Arg Ser Arg Gln Ser Lys Val Glu Leu Ala Cys Gly Lys 130 135 140

Ser Asn Arg Leu Ala His Val Ser Glu Pro Ser Thr Cys Val Tyr Ala 145 150 155 160

Leu Thr Phe Glu Thr Pro Leu Val Cys His Pro His Ala Leu Leu Val
165 170 175

Tyr Pro Thr Leu Pro Glu Ala Leu Gln Arg Gln Trp Asp Gln Val Glu 180 185 190

Gln Asp Leu Ala Asp Glu Leu Ile Thr Pro Gln Gly His Glu Lys Leu 195 200 205

Leu Arg Thr Leu Phe Glu Asp Ala Gly Tyr Leu Lys Thr Pro Glu Glu 210 215 220

Asn Glu Pro Thr Gln Leu Glu Gly Gly Pro Asp Ser Leu Gly Phe Glu 225 230 235 240

Thr Leu Glu Asn Cys Arg Lys Ala His Lys Glu Leu Ser Lys Glu Ile 245 250 255

Lys Arg Leu Lys Gly Leu Leu Thr Gln His Gly Ile Pro Tyr Thr Arg 260 265 270

Pro Thr Glu Thr Ser Asn Leu Glu His Leu Gly His Glu Thr Pro Arg 275 280 285

Ala Lys Ser Pro Glu Gln Leu Arg Gly Asp Pro Gly Leu Arg Gly Ser 290 295 300

Leu 305

<210> 959

<211> 289

<212> PRT

<213> Homo sapiens

<400> 959

Met Phe Val Leu Leu Tyr Val Thr Ser Phe Ala Ile Cys Ala Ser Gly
1 5 10 15

Gln Pro Arg Gly Asn Gln Leu Lys Gly Glu Asn Tyr Ser Pro Arg Tyr 20 25 30

Ile Cys Ser Ile Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Ala 35 40 45

Asn Gly Ser Pro Gly Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp 50 60

Gly Arg Asp Gly Arg Lys Gly Glu Lys Gly Glu Lys Gly Thr Ala Gly 65 70 75 80

Leu Arg Gly Lys Thr Gly Pro Leu Gly Leu Ala Gly Glu Lys Gly Asp 85 90 95

Gln Gly Glu Thr Gly Lys Lys Gly Pro Ile Gly Pro Glu Gly Glu Lys 100 105 110

Gly Glu Val Gly Pro Ile Gly Pro Pro Gly Pro Lys Gly Asp Arg Gly
115 120 125

Glu Gln Gly Asp Pro Gly Leu Pro Gly Val Cys Arg Cys Gly Ser Ile 130 140

Val Leu Lys Ser Ala Phe Ser Val Gly Ile Thr Thr Ser Tyr Pro Glu

145 150 155 160

Glu Arg Leu Pro Ile Ile Phe Asn Lys Val Leu Phe Asn Glu Gly Glu
165 170 175

His Tyr Asn Pro Ala Thr Gly Lys Phe Ile Cys Ala Phe Pro Gly Ile 180 185 190

Tyr Tyr Phe Ser Tyr Asp Ile Thr Leu Ala Asn Lys His Leu Ala Ile 195 200 205

Gly Leu Val His Asn Gly Gln Tyr Arg Ile Lys Thr Phe Asp Ala Asn 210 215 220

Thr Gly Asn His Asp Val Ala Ser Gly Ser Thr Val Ile Tyr Leu Gln 225 230 235 240

Pro Glu Asp Glu Val Trp Leu Glu Ile Phe Phe Thr Asp Gln Asn Gly 245 250 255

Leu Phe Ser Asp Pro Gly Trp Ala Asp Ser Leu Phe Ser Gly Phe Leu 260 265 270

Leu Tyr Val Asp Thr Asp Tyr Leu Asp Ser Ile Ser Glu Asp Asp Glu 275 280 285

Leu

<210> 960

<211> 142

<212> PRT

<213> Homo sapiens

<400> 960

Met Cys Ala Phe Pro Trp Leu Leu Leu Leu Leu Leu Gln Glu Gly
1 5 10 15

Ser Gln Arg Arg Leu Trp Arg Trp Cys Gly Ser Glu Glu Val Val Ala 20 25 30

Val Leu Gln Glu Ser Ile Ser Leu Pro Leu Glu Ile Pro Pro Asp Glu 35 40 45

Glu Val Glu Asn Ile Ile Trp Ser Ser His Lys Ser Leu Ala Thr Val

Val Pro Gly Lys Glu Gly His Pro Ala Thr Ile Met Val Thr Asn Pro 65 70 75 80

His Tyr Gln Gly Gln Val Ser Phe Leu Asp Pro Ser Tyr Ser Leu His 85 90 95

Ile Ser Asn Leu Ser Trp Glu Asp Ser Gly Leu Leu Pro Ser Ser Ser 100 105 110

Gln Pro Glu Asn Ile Pro Asp Leu Tyr His Ala Ala Val Gln Ser Met 115 120 125

Cys Leu Pro Met Ala Val Arg Ala Pro Asp His Cys Glu Leu 130 135 140

<210> 961

<211> 282

<212> PRT

<213> Homo sapiens

<400> 961

Met Leu Ala Leu Thr Leu Ala Lys Ala Asp Ser Pro Arg Thr Ala Leu

1 5 10 15

Leu Cys Ser Ala Trp Leu Leu Thr Ala Ser Phe Ser Ala Gln Gln His  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$ 

Lys Gly Ser Leu Gln Val His Gln Thr Leu Ser Val Glu Met Asp Gln 35 40 45

Val Leu Lys Ala Leu Ser Phe Pro Lys Lys Lys Ala Ala Leu Leu Ser 50 55 60

Ala Ala Ile Leu Cys Phe Leu Arg Thr Ala Leu Arg Gln Ser Phe Ser 65 70 75 80

Ser Ala Leu Val Ala Leu Val Pro Ser Gly Ala Gln Pro Leu Pro Ala 85 90 . 95

Thr Lys Asp Thr Val Leu Ala Pro Leu Arg Met Ser Gln Val Arg Ser 100 105 110

Leu Val Ile Gly Leu Gln Asn Leu Leu Val Gln Lys Asp Pro Leu Leu 115 120 125

Ser Gln Ala Cys Val Gly Cys Leu Glu Ala Leu Leu Asp Tyr Leu Asp 130 140

Ala Arg Ser Pro Asp Ile Ala Leu His Val Ala Ser Gln Pro Trp Asn 145 150 155 160

Arg Phe Leu Leu Phe Thr Leu Leu Asp Ala Gly Glu Asn Ser Phe Leu 165 170 175

Arg Pro Glu Ile Leu Arg Leu Met Thr Leu Phe Met Arg Tyr Arg Ser 180 . 185 . 190

Ser Ser Val Leu Ser His Glu Glu Val Gly Asp Val Leu Gln Gly Val 195 200 205

Ala Leu Ala Asp Leu Ser Thr Leu Ser Asn Thr Thr Leu Gln Ala Leu 210 215 220

His Gly Phe Phe Gln Gln Leu Gln Ser Met Gly His Leu Ala Asp His 225 230 235 240

Ser Met Ala Gln Thr Leu Gln Ala Ser Leu Glu Gly Leu Pro Pro Ser 245 250 255

Thr Ser Ser Gly Gln Pro Pro Leu Gln Asp Met Leu Cys Leu Gly Gly 260 265 270

Val Ala Val Ser Leu Ser His Ile Arg Asn 275 280

<210> 962

<211> 178

<212> PRT

<213> Homo sapiens

<400> 962

Met Leu Pro Leu Leu Ile Ile Cys Leu Leu Pro Ala Ile Glu Gly Lys

1 5 10 15

Asn Cys Leu Arg Cys Trp Pro Glu Leu Ser Ala Leu Ile Asp Tyr Asp 20 25 30

Leu Gln Ile Leu Trp Val Thr Pro Gly Pro Pro Thr Glu Leu Ser Gln 35 40

Ser Ile His Ser Leu Phe Leu Glu Asp Asn Asn Phe Leu Lys Pro Trp 50 55 60

Tyr Leu Asp Arg Asp His Leu Glu Glu Glu Thr Ala Lys Phe Phe Thr 65 70 75 80

Gln Val His Gln Ala Ile Lys Thr Leu Arg Asp Asp Lys Thr Val Leu 85 90 95

Leu Glu Glu Ile Tyr Thr His Lys Asn Leu Phe Thr Glu Arg Leu Asn 100 105 110

Lys Ile Ser Asp Gly Leu Lys Glu Lys Gly Ala Pro Pro Leu Ser Met 115 120 125

Asn Ala Phe Pro Ala Pro Ser Pro Thr Cys Thr Pro Glu Pro Leu Gly 130 135 140

Ser Val Cys Leu Pro Ser Thr Ser Val Ser Leu Pro Ser His Pro Pro 145 150 155 160

Trp Gln Pro Ala Met Ser Pro Val Pro Gly Thr Gly Gly Pro Pro Cys 165 170 175

Gly Leu

<210> 963

<211> 233

<212> PRT

<213> Homo sapiens

<400> 963

Met Ala Leu Lys Asn Lys Phe Ser Cys Leu Trp Ile Leu Gly Leu Cys

1 10 15

Leu Val Ala Thr Thr Ser Ser Lys Ile Pro Ser Ile Thr Asp Pro His 20 25 30

Phe Ile Asp Asn Cys Ile Glu Ala His Asn Glu Trp Arg Gly Lys Val Asn Pro Pro Ala Ala Asp Met Lys Tyr Met Ile Trp Asp Lys Gly Leu Ala Lys Met Ala Lys Ala Trp Ala Asn Gln Cys Lys Phe Glu His Asn Asp Cys Leu Asp Lys Ser Tyr Lys Cys Tyr Ala Ala Phe Glu Tyr Val Gly Glu Asn Ile Trp Leu Gly Gly Ile Lys Ser Phe Thr Pro Arg His 105 Ala Ile Thr Ala Trp Tyr Asn Glu Thr Gln Phe Tyr Asp Phe Asp Ser Leu Ser Cys Ser Arg Val Cys Gly His Tyr Thr Gln Leu Val Trp Ala Asn Ser Phe Tyr Val Gly Cys Ala Val Ala Met Cys Pro Asn Leu Gly 155 Gly Ala Ser Thr Ala Ile Phe Val Cys Asn Tyr Gly Pro Ala Gly Asn 165 170 Phe Ala Asn Met Pro Pro Tyr Val Arg Gly Glu Ser Cys Ser Leu Cys Ser Lys Glu Glu Lys Cys Val Lys Asn Leu Cys Lys Asn Pro Phe Leu 200 Lys Pro Thr Gly Arg Ala Pro Gln Gln Thr Ala Phe Asn Pro Phe Ser Leu Gly Phe Leu Leu Leu Arg Ile Phe 230 225 <210> 964 <211> 298 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (42) <223> Xaa equals any amino acid <220> <221> SITE <222> (58) <223> Xaa equals any amino acid

10

Met Ala Arg Arg Ser Arg His Arg Leu Leu Leu Leu Leu Arg Tyr

<400> 964

Leu Val Val Ala Leu Gly Tyr His Lys Ala Tyr Gly Phe Ser Ala Pro  $20 \\ 25 \\ 30$ 

- Lys Asp Gln Gln Val Val Thr Ala Val Xaa Tyr Gln Glu Ala Ile Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$
- Ala Cys Lys Thr Pro Lys Lys Thr Val Xaa Ser Arg Leu Glu Trp Lys 50 55 60
- Lys Leu Gly Arg Ser Val Ser Phe Val Tyr Tyr Gln Gln Thr Leu Gln 65 70 75 80
- Gly Asp Phe Lys Asn Arg Ala Glu Met Ile Asp Phe Asn Ile Arg Ile 85 90 95
- Lys Asn Val Thr Arg Ser Asp Ala Gly Lys Tyr Arg Cys Glu Val Ser 100 105 110
- Ala Pro Ser Glu Gln Gly Gln Asn Leu Glu Glu Asp Thr Val Thr Leu 115 120 125
- Glu Val Leu Val Ala Pro Ala Val Pro Ser Cys Glu Val Pro Ser Ser 130 135 140
- Ala Leu Ser Gly Thr Val Val Glu Leu Arg Cys Gln Asp Lys Glu Gly 145 150 155 160
- Asn Pro Ala Pro Glu Tyr Thr Trp Phe Lys Asp Gly Ile Arg Leu Leu 165 170 175
- Glu Asn Pro Arg Leu Gly Ser Gln Ser Thr Asn Ser Ser Tyr Thr Met
  180 185 190
- Asn Thr Lys Thr Gly Thr Leu Gln Phe Asn Thr Val Ser Lys Leu Asp 195 200 205
- Thr Gly Glu Tyr Ser Cys Glu Ala Arg Asn Ser Val Gly Tyr Arg Arg 210 215 220
- Cys Pro Gly Lys Arg Met Gln Val Asp Asp Leu Asn Ile Ser Gly Ile 225 230 235 240
- Ile Ala Ala Val Val Val Ala Leu Val Ile Ser Val Cys Gly Leu 245 250 255
- Gly Val Cys Tyr Ala Gln Arg Lys Gly Tyr Phe Ser Lys Glu Thr Ser 260 265 270
- Phe Gln Lys Ser Asn Ser Ser Ser Lys Ala Thr Thr Met Ser Glu Asn 275 280 285
- Asp Phe Lys His Thr Lys Ser Phe Ile Ile 290 295

<210> 965

<211> 46

<212> PRT

<213> Homo sapiens

<400> 965

Met Glu Pro Val Ala Leu Leu Gln Pro Thr Trp Trp Leu Leu Asn Val 1 5 10 15

Thr Leu Pro Leu Val Ala Trp Ser Gly Pro Leu Ile Cys Arg Pro Leu 20 25 30

Leu His Gly Glu Gly Arg Gln Gly Ala Ala Cys Leu Gln Gly 35 40 45

<210> 966

<211> 257

<212> PRT

<213> Homo sapiens

<400> 966

Met Thr Ala Ala Val Phe Phe Gly Cys Ala Phe Ile Ala Phe Gly Pro 1 5 10 15

Ala Leu Ala Leu Tyr Val Phe Thr Ile Ala Ile Glu Pro Leu Arg Ile 20 25 30

Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser Leu Leu Ile 35 40 45

Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile Asp Asn Lys Asp 50 55 60

Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly Ala Phe Val Ser Val 65 70 75 80

Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr Tyr Lys Leu Leu Lys Lys
85
90
95

Ala Ser Glu Gly Leu Lys Ser Ile Asn Pro Gly Glu Thr Ala Pro Ser 100 105 110

Met Arg Leu Leu Ala Tyr Val Ser Gly Leu Gly Phe Gly Ile Met Ser 115 120 125

Gly Val Phe Ser Phe Val Asn Thr Leu Ser Asp Ser Leu Gly Pro Gly 130 135 140

Thr Val Gly Ile His Gly Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala 145 150 155 160

Phe Met Thr Leu Val Ile Ile Leu Leu His Val Phe Trp Gly Ile Val 165 170 175

Phe Phe Asp Gly Cys Glu Lys Lys Lys Trp Gly Ile Leu Leu Ile Val 180 185 190

Leu Leu Thr His Leu Leu Val Ser Ala Gln Thr Phe Ile Ser Ser Tyr 195 200 205

Tyr Gly Ile Asn Leu Ala Ser Ala Phe Ile Ile Leu Val Leu Met Gly 210 215 220

Thr Trp Ala Phe Leu Ala Ala Gly Gly Ser Cys Arg Ser Leu Lys Leu

225 230 235 240

Cys Leu Leu Cys Gln Asp Lys Asn Phe Leu Leu Tyr Asn Gln Arg Ser 245 250 255

Arg

<210> 967

<211> 312

<212> PRT

<213> Homo sapiens

<400> 967

Met Pro Pro Pro Arg Val Phe Lys Ser Phe Leu Ser Leu Leu Phe Gln

1 5 10 15

Gly Leu Ser Val Leu Leu Ser Leu Ala Gly Asp Val Leu Val Ser Met  $20 \\ \hspace{1.5cm} 25 \\ \hspace{1.5cm} 30$ 

Tyr Arg Glu Val Cys Ser Ile Arg Phe Leu Phe Thr Ala Val Ser Leu  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Leu Ser Leu Phe Leu Ser Ala Phe Trp Leu Gly Leu Leu Tyr Leu Val 50 55 60

Ser Pro Leu Glu Asn Glu Pro Lys Glu Met Leu Thr Leu Ser Glu Tyr 65 70 75 80

His Glu Arg Val Arg Ser Gln Gly Gln Gln Leu Gln Gln Leu Gln Ala 85 90 95

Glu Leu Asp Lys Leu His Lys Glu Val Ser Thr Val Arg Ala Ala Asn 100 105 110

Ser Glu Arg Val Ala Lys Leu Val Phe Gln Arg Leu Asn Glu Asp Phe 115 120 125

Val Arg Lys Pro Asp Tyr Ala Leu Ser Ser Val Gly Ala Ser Ile Asp 130 135 140

Leu Gln Lys Thr Ser His Asp Tyr Ala Asp Arg Asn Thr Ala Tyr Phe 145 150 155 160

Trp Asn Arg Phe Ser Phe Trp Asn Tyr Ala Arg Pro Pro Thr Val Ile 165 170 175

Leu Glu Pro His Val Phe Pro Gly Asn Cys Trp Ala Phe Glu Gly Asp 180 185 190

Gln Gly Gln Val Val Ile Gln Leu Pro Gly Arg Val Gln Leu Ser Asp 195 200 205

Ile Thr Leu Gln His Pro Pro Pro Ser Val Glu His Thr Gly Gly Ala 210 215 220

Asn Ser Ala Pro Arg Asp Phe Ala Val Phe Gly Leu Gln Val Tyr Asp 225 230 235 240

Glu Thr Glu Val Ser Leu Gly Lys Phe Thr Phe Asp Val Glu Lys Ser 245 250 255

Glu Ile Gln Thr Phe His Leu Gln Asn Asp Pro Pro Ala Ala Phe Pro 260 265 270

Lys Val Lys Ile Gln Ile Leu Ser Asn Trp Gly His Pro Arg Phe Thr 275 280 285

Cys Leu Tyr Arg Val Arg Ala His Gly Val Arg Thr Ser Glu Gly Ala 290 295 300

Glu Gly Ser Ala Gln Gly Pro His 305

<210> 968

<211> 142

<212> PRT

<213> Homo sapiens

<400> 968

Met Pro Arg Cys Arg Trp Leu Ser Leu Ile Leu Leu Thr Ile Pro Leu 1 5 10 15

Ala Leu Val Ala Arg Lys Asp Pro Lys Lys Asn Glu Thr Gly Val Leu 20 . 25 . 30

Arg Lys Leu Lys Pro Val Asn Ala Ser Asn Ala Asn Val Lys Gln Cys 35 40 45

Leu Trp Phe Ala Met Gln Glu Tyr Asn Lys Glu Ser Glu Asp Lys Tyr 50 60

Val Phe Leu Val Val Lys Thr Leu Gln Ala Gln Leu Gln Val Thr Asn 65 70 75 80

Leu Leu Glu Tyr Leu Ile Asp Val Glu Ile Ala Arg Ser Asp Cys Arg 85, 90 95

Lys Pro Leu Ser Thr Asn Glu Ile Cys Ala Ile Gln Glu Asn Ser Lys 100 105 110

Leu Lys Arg Lys Leu Ser Cys Ser Phe Leu Val Gly Ala Leu Pro Trp 115 120 125

Asn Gly Glu Phe Thr Val Met Glu Lys Lys Cys Glu Asp Ala 130 135 140

<210> 969

<211> 58

<212> PRT

<213> Homo sapiens

<400> 969

Met Ser Leu Leu Phe Ile Val Ser Leu Leu Glu Leu Gly Pro Met Ala 1 5 10 15

Leu Leu Ala Glu Arg Lys Ala Met Lys Pro Ser Leu Gly Leu Arg Leu 20 25 30

Glu Glu Glu Glu Glu Glu Thr Pro Phe Glu Glu Gln Arg Ala Val Ser 35 40 45

Val Ile Pro Gly Val Pro Val Thr Tyr Leu 50 55

<210> 970

<211> 44

<212> PRT

<213> Homo sapiens

<400> 970

Met Gly Trp Leu Trp Leu Glu Leu Leu Gly Leu Ser Ile Glu Glu Thr
1 5 10 15

Leu Val Trp Ala Phe Leu Asn Lys Phe Leu Asp Ser Ser Ala Ala Leu 20 25 30

Leu Trp Arg Ile Leu Gly Lys Ser Asn Leu Ser Thr 35 40

<210> 971

<211> 158

<212> PRT

<213> Homo sapiens

<400> 971

Met Ala Leu Glu Val Leu Met Leu Leu Ala Val Leu Ile Trp Thr Gly
1 5 10 15

Ala Glu Asn Leu His Val Lys Ile Ser Cys Ser Leu Asp Trp Leu Met 20 25 30

Val Ser Val Ile Pro Val Ala Glu Ser Arg Asn Leu Tyr Ile Phe Ala 35 40 45

Asp Glu Leu His Leu Gly Met Gly Cys Pro Ala Asn Arg Ile His Thr 50 55 60

Tyr Val Tyr Glu Phe Ile Tyr Leu Val Arg Asp Cys Gly Ile Arg Thr 65 70 75 80

Arg Val Val Ser Glu Glu Thr Leu Leu Phe Gln Thr Glu Leu Tyr Phe 85 90 95

Thr Pro Arg Asn Ile Asp His Asp Pro Gln Glu Ile His Leu Glu Cys

Ser Thr Ser Arg Lys Ser Val Trp Leu Thr Pro Val Ser Thr Glu Asn 115 120 125

Glu Ile Lys Leu Asp Pro Ser Pro Phe Ile Ala Asp Phe Gln Thr Thr 130 135 140

Ala Glu Glu Leu Gly Leu Leu Ser Ser Ser Pro Asn Leu Leu 145 150 155

<210> 972

<211> 89

<212> PRT

<213> Homo sapiens

<400> 972

Met Val Ser Ala Ser Val Phe Val Gly Leu Val Ile Phe Tyr Ile Ala 1 5 10 15

Phe Cys Leu Leu Trp Pro Leu Val Val Lys Gly Cys Thr Met Ile Arg \$20\$ \$25\$ \$30

Trp Lys Ile Asn Asn Leu Ile Ala Ser Glu Ser Tyr Tyr Thr Tyr Ala 35 40 45

Ser Ile Ser Gly Ile Ser Ser Met Pro Ser Leu Arg His Ser Arg Met
. 50 55 60

Gly Ser Met Phe Ser Ser Arg Met Thr Glu Asp Arg Ala Glu Pro Lys
65 70 75 80

Glu Ala Val Glu Arg Gln Leu Met Thr 85

<210> 973

<211> 38

<212> PRT

<213> Homo sapiens

<400> 973

Met Val Ser Lys His Ser Leu Asn Leu His Phe Phe Tyr Trp Lys Gly 1 5 10 15

Gly Cys Ala Cys Phe Thr Ser Glu Pro Arg Val Phe Val Val Glu  $20 \ 25 \ 30$ 

Leu Ser Leu Leu Asp Cys 35

<210> 974

<211> 181

<212> PRT

<213> Homo sapiens

<400> 974

Met Met Leu Met Pro Tyr Gly Ala Leu Ile Ile Gly Phe Val Cys Gly
1 5 10 15

Ile Ile Ser Thr Leu Gly Phe Val Tyr Leu Thr Pro Phe Leu Glu Ser

Arg Leu His Ile Gln Asp Thr Cys Gly Ile Asn Asn Leu His Gly Ile

35 40 45

Pro Gly Ile Ile Gly Gly Ile Val Gly Ala Val Thr Ala Ala Ser Ala 50 55 60

Ser Leu Glu Val Tyr Gly Lys Glu Gly Leu Val His Ser Phe Asp Phe 65 70 75 80

Gln Gly Phe Asn Gly Asp Trp Thr Ala Arg Thr Gln Gly Lys Phe Gln 85 90 95

Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu Met Gly Gly Ile
100 105 110

Ile Val Gly Leu Ile Leu Arg Leu Pro Phe Trp Gly Gln Pro Ser Asp 115 120 125

Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met Pro Glu Gly Asn 130 135 140

Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys Pro Ser Gly Pro 145 150 155 160

Ser Val Pro Ser Val Pro Met Val Ser Pro Leu Pro Met Ala Ser Ser 165 170 175

Val Pro Leu Val Pro 180

<210> 975

<211> 822

<212> PRT

<213> Homo sapiens

<400> 975

Met Ala Ala Ala Val Val Ala Glu Gly Asp Ser Asp Ser Arg Pro
1 5 10 15

Gly Gln Glu Leu Leu Val Ala Trp Asn Thr Val Ser Thr Gly Leu Val
20 25 30

Pro Pro Ala Ala Leu Gly Leu Val Ser Ser Arg Thr Ser Gly Ala Val 35 40 45

Pro Pro Lys Glu Glu Glu Leu Arg Ala Ala Val Glu Val Leu Arg Gly 50 60

His Gly Leu His Ser Val Leu Glu Glu Trp Phe Val Glu Val Leu Gln 65 70 75 80

Asn Asp Leu Gln Ala Asn Ile Ser Pro Glu Phe Trp Asn Ala Ile Ser 85 90 95

Gln Cys Glu Asn Ser Ala Asp Glu Pro Gln Cys Leu Leu Leu Leu 100 105 110

Asp Ala Phe Gly Leu Leu Glu Ser Arg Leu Asp Pro Tyr Leu Arg Ser 115 120 125

Leu	Glu 130	Leu	Leu	Glu	Lys	Trp 135	Thr	Arg	Leu	Gly	Leu 140	Leu	Met	Gly	Thr
Gly 145	Ala	Gln	Gly	Leu	Arg 150	Glu	Glu	Val	His	Thr 155	Met	Leu	Arg	Gly	Val 160
Leu	Phe	Phe	Ser	Thr 165	Pro	Arg	Thr	Phe	Gln 170	Glu	Met	Ile	Gln	Arg 175	Leu
Tyr	Gly	Cys	Phe 180	Leu	Arg	Val	Tyr	Met 185	Gln	Ser	Lys	Arg	Lys 190	Gly	Glu
Gly	Gly	Thr 195	Asp	Pro	Glu	Leu	Glu 200	Gly	Glu	Leu	Asp	Ser 205	Arg	Tyr	Ala
Arg	Arg 210	Arg	Tyr	Tyr	Arg	Leu 215	Leu	Gln	Ser	Pro	Leu 220	Суѕ	Ala	Gly	Cys
Ser 225	Ser	Asp	Lys	Gln	Gln 230	Cys	Trp	Cys	Arg	Gln 235	Ala	Leu	Glu	Gln	Phe 240
His	Gln	Leu	Ser	Gln 245	Val	Leu	His	Arg	Leu 250	Ser	Leu	Leu	Glu	Arg 255	Val
Ser	Ala	Glu	Ala 260	Val	Thr	Thr	Thr	Leu 265	His	Gln	Val	Thr	Arg 270	Glu	Arg
Met	Glu	Asp 275	Arg	Cys	Arg	Gly	Glu 280	Tyr	Glu	Arg	Ser	Phe 285	Leu	Arg	Glu
Phe	His 290	Lys	Trp	Ile	Glu	Arg 295	Val	Val	Gly	Trp	Leu 300	Gly	Lys	Val	Phe
Leu 305	Gln	Asp	Gly	Pro	Ala 310	Arg	Pro	Ala	Ser	Pro 315	Glu	Ala	Gly	Asn	Thr 320
Leu	Arg	Arg	Trp	Arg 325	Cys	His	Val	Gln	Arg 330	Phe	Phe	Tyr	Arg	Ile 335	Tyr
Ala	Ser	Leu	Arg 340	Ile	Glu	Glu	Leu	Phe 345	Ser	Ile	Val	Arg	Asp 350	Phe	Pro
Asp	Ser	Arg 355	Pro	Ala	Ile	Glu	Asp 360	Leu	Lys	Tyr	Cys	Leu 365	Glu	Arg	Thr
Asp	Gln 370	Arg	Gln	Gln	Leu	Leu 375	Val	Ser	Leu	Lys	Ala 380	Ala	Leu	Glu	Thr
Arg 385	Leu	Leu	His	Pro	Gly 390	Val	Asn	Thr	Cys	Asp 395	Ile	Ile	Thr	Leu	Туг 400
Ile	Ser	Ala	Ile	Lys 405	Ala	Leu	Arg	Val	Leu 410	Asp	Pro	Ser	Met	Val 415	Ile
Leu	Glu	Val	Ala 420	Cys	Glu	Pro	Ile	Arg 425	Arg	Tyr	Leu	Arg	Thr 430	Arg	Glu
Asp	Thr	Val 435	Arg	Gln	Ile	Val	Ala 440	Gly	Leu	Thr	Gly	Asp 445	Ser	Asp	Gly
Thr	Gly	Asp	Leu	Ala	Val	Glu	Leu	Ser	Lys	Thr	Asp	Pro	Ala	Ser	Leu

450 455 460

Glu Thr Gly Gln Asp Ser Glu Asp Asp Ser Gly Glu Pro Glu Asp Trp
465 470 475 480

- Val Pro Asp Pro Val Asp Ala Asp Pro Gly Lys Ser Ser Ser Lys Arg
  485 490 495
- Arg Ser Ser Asp Ile Ile Ser Leu Leu Val Ser Ile Tyr Gly Ser Lys 500 505 510
- Asp Leu Phe Ile Asn Glu Tyr Arg Ser Leu Leu Ala Asp Arg Leu Leu 515 520 525
- His Gln Phe Ser Phe Ser Pro Glu Arg Glu Ile Arg Asn Val Glu Leu 530 540
- Leu Lys Leu Arg Phe Gly Glu Ala Pro Met His Phe Cys Glu Val Met 545 550 560
- Leu Lys Asp Met Ala Asp Ser Arg Arg Ile Asn Ala Asn Ile Arg Glu 565 570 575
- Glu Asp Glu Lys Arg Pro Ala Glu Glu Gln Pro Pro Phe Gly Val Tyr 580 585 590
- Ala Val Ile Leu Ser Ser Glu Phe Trp Pro Pro Phe Lys Asp Glu Lys 595 600 605
- Leu Glu Val Pro Glu Asp Ile Arg Ala Ala Leu Glu Ala Tyr Cys Lys 610 620
- Lys Tyr Glu Gln Leu Lys Ala Met Arg Thr Leu Ser Trp Lys His Thr 625 630 635 640
- Leu Gly Leu Val Thr Met Asp Val Glu Leu Ala Asp Arg Thr Leu Ser 645 650 655
- Val Ala Val Thr Pro Val Gln Ala Val Ile Leu Leu Tyr Phe Gln Asp 660 665 670
- Gln Ala Ser Trp Thr Leu Glu Glu Leu Ser Lys Ala Val Lys Met Pro 675 680 685
- Val Ala Leu Leu Arg Arg Met Ser Val Trp Leu Gln Gln Gly Val 690 695 700
- Leu Arg Glu Glu Pro Pro Gly Thr Phe Ser Val Ile Glu Glu Glu Arg
  705 710 715 720
- Pro Gln Asp Arg Asp Asn Met Val Leu Ile Asp Ser Asp Asp Glu Ser 725 730 735
- Asp Ser Gly Met Ala Ser Gln Ala Asp Gln Lys Glu Glu Glu Leu Leu 740 745 750
- Leu Phe Trp Thr Tyr Ile Gln Ala Met Leu Thr Asn Leu Glu Ser Leu 755 760 765
- Ser Leu Asp Arg Ile Tyr Asn Met Leu Arg Met Phe Val Val Thr Gly 770 780

Pro Ala Leu Ala Glu Ile Asp Leu Gln Glu Leu Gln Gly Tyr Leu Gln 785 790 795 800

Lys Lys Val Arg Asp Gln Gln Leu Val Tyr Ser Ala Gly Val Tyr Arg 805 810 815

Leu Pro Lys Asn Cys Ser 820

<210> 976

<211> 71

<212> PRT

<213> Homo sapiens

<400> 976

Met Leu Gln Ala Ala Ser Leu Ser Leu Val Thr Trp Val Val Cys Thr 1 5 10 15

Val Trp Leu Glu Thr Thr Val Pro Pro Ser Leu Pro Glu Pro Pro Met
20 25 30

Trp Pro Leu Ser Ser Asp Ser Ser Trp Ser Leu Trp Ile Ser Thr Gly
35 40 45

Met Ala Pro Ala Pro Ser Ser Ser Thr Arg Ser Phe Ser Val Leu Pro 50 60

Glu Ile Cys Phe Cys Leu Trp 65 70

<210> 977

<211> 101

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (67)

<223> Xaa equals any amino acid

<400> 977

Met Glu Leu Glu Arg Cys Ser Val Val Leu Cys Ile Leu Ala Asn Leu 1 5 10 15

Ala Val Leu Arg Ala Leu Phe Leu Pro Cys Ile Ile Phe His Cys Val 20 25 30

Ser Asp Ser Arg Ser Val Asn Arg Glu Thr Lys Val Lys Phe Val His  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Thr Ser Val His Gly Val Gly His Ser Phe Val Gln Ser Ala Phe Lys 50 55 60

Ala Phe Xaa Leu Val Pro Pro Glu Ala Val Pro Glu Gln Lys Asp Pro 65 70 75 80

Asp Pro Glu Phe Pro Thr Val Lys Tyr Pro Asn Pro Glu Glu Gly Lys 85 90 95

Gly Val Leu Val Thr . 100

<210> 978

<211> 188

<212> PRT

<213> Homo sapiens

<400> 978

Met Ile Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg 1 5 10 15

Val Ala Asn Glu Leu Asn Ala Arg Arg Ser Phe Thr Ala Ala Asp  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$ 

Ser Lys Asp Glu Glu Val Lys Val Ala Pro Arg Arg Ser Phe Leu Asp 35 40 45

Phe Asp Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val $50 \\ 55 \\ 60$ 

Gln Cys Val Leu Ala Phe Thr Gly Val Ala Gly Tyr Ile Thr Tyr Leu 65 70 75 80

Ser Ile Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val 85 90 95

Leu Thr Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg 100 105 110

His Gln Ser Thr Glu Gly Met Ser Ile Lys Met Val Leu Met Trp Thr 115 120 125

Ser Gly Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro 130 135 140

Leu Gln Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala 145 150 155 160

Ile Leu Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala 165 170 175

Pro His Ala Val His Pro Thr Gly Thr Lys Ala Leu 180 185

<210> 979

<211> 84

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (65)

<223> Xaa equals any amino acid

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<400> 979 ·
Met Trp Ser Ser Ser Trp Asp His Arg Ile Thr Thr Pro Arg Leu Ala
Asn Phe Phe Phe Phe Phe Phe Phe Phe Phe Val Glu Met Gly Phe
Arg Tyr Val Gly Gln Ala Gly Leu Lys Leu Leu Ala Ser Ser Asn Leu
Pro Ala Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His His
Xaa Trp Leu Gly Gly Leu Ile Lys Thr Pro Ile Leu Ser Leu Thr Pro
                                        75
Arg Val Ser Gly
<210> 980
<211> 40
<212> PRT
<213> Homo sapiens
<400> 980
Met Leu Gln Glu Val Lys Leu Asp Phe Leu Trp Leu Leu Asn Leu Pro
Leu Ile Leu Leu Phe Ser Ile Leu Glu Ser Ser Met Lys Ile Cys Thr
                               25
Asn Ala Met Phe Thr Arg Thr Gly
<210> 981
<211> 59
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (54)
<223> Xaa equals any amino acid
<400> 981
Met Trp Thr Ala Arg Arg Cys Thr Glu Thr Val Ala Val Ser Leu Arg
Ile Phe Pro Leu Val Leu Ala Met Pro Leu Gln Gly Lys Cys Thr Ser
Thr Cys Gln Arg Lys Pro Leu Leu Leu Val Phe Ile Phe Val Val Asn
Phe Leu Tyr Ile Pro Xaa Ala Ala Phe Leu His
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<210> 982

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<211> 190
<212> PRT
<213> Homo sapiens
<400> 982
Met Arg Ala Cys Pro Trp Ala Gln Val Pro Leu Tyr Leu Leu Leu Asp
Gly His Leu Ala Val Ser Gln Ala Gly Val Met Ala Gly Val Ser Gly
Gly Arg Gly Gly Arg Arg Leu Arg Gly Pro Ile Thr Ser Arg Val Ile
Thr Ser Cys Gln Gln Pro Gly Val Gly Val Trp Val Ser Leu Arg Pro
Glu Leu Leu Asn Leu Glu Ser Leu Gly Val Ala Ala Lys Gly Val Tyr
Asp Lys His Val Ser Leu Asp Ile Ser Gly Glu Arg Ser Gly Ala Leu
Val Thr Phe Ser Lys Gly Cys Trp Ala Ser Glu Gln Ser Pro Pro Met
Ser Gln Pro Leu Gln Gly Pro Ser Leu Ser Leu His Pro Arg Pro Ser
                           120
Ala Ala Leu Val Met Ser Arg Arg Lys Val Leu Gly Cys Ala Gln Ser
Gln Glu Ser Lys Ile Cys Gln Ala Lys Ala Pro Gly Lys Ser Arg Arg
                   150
                                        155
Ser Leu Gly Trp Pro Pro Gly Cys Gly Ala Ala Arg Ala Lys Thr Val
Asn Thr Ala Leu Gln Leu Ser Glu Pro Gln Phe Ser Asn Leu
                                185
<210> 983
<211> 61
<212> PRT
<213> Homo sapiens
<400> 983
Met Asn Ala Ser Leu Ile Ser Trp Val Leu Val Leu His Arg Ile Cys
Leu Gly Leu Ser Asp Ile Pro Lys Glu Asn Cys Ile Ile Thr Ile Ser
```

.Gly Met Gln Leu Ser His His Gly Gln Ser Leu Gly Lys Trp Ala Glu

Lys Leu His Val Phe Tyr Ser Leu Phe Ser Phe Leu Leu 50 55 60

<210> 984

<211> 362

<212> PRT

<213> Homo sapiens

<400> 984

Met Arg Thr Leu Phe Asn Leu Leu Trp Leu Ala Leu Ala Cys Ser Pro 1 5 10

Val His Thr Thr Leu Ser Lys Ser Asp Ala Lys Lys Ala Ala Ser Lys 20 25 30

Thr Leu Leu Glu Lys Ser Gln Phe Ser Asp Lys Pro Val Gln Asp Arg 35 40 45

Gly Leu Val Val Thr Asp Leu Lys Ala Glu Ser Val Val Leu Glu His 50 55 60

Arg Ser Tyr Cys Ser Ala Lys Ala Arg Asp Arg His Phe Ala Gly Asp 65 70 75 80

Val Leu Gly Tyr Val Thr Pro Trp Asn Ser His Gly Tyr Asp Val Thr 85 90 95

Lys Val Phe Gly Ser Lys Phe Thr Gln Ile Ser Pro Val Trp Leu Gln
100 105 110

Leu Lys Arg Arg Gly Arg Glu Met Phe Glu Val Thr Gly Leu His Asp 115 120 125

Val Asp Gln Gly Trp Met Arg Ala Val Arg Lys His Ala Lys Gly Leu 130 135 . 140

His Ile Val Pro Arg Leu Leu Phe Glu Asp Trp Thr Tyr Asp Asp Phe 145 150 155 160

Arg Asn Val Leu Asp Ser Glu Asp Glu Ile Glu Glu Leu Ser Lys Thr 165 170 175

Val Val Gln Val Ala Lys Asn Gln His Phe Asp Gly Phe Val Val Glu 180 185 190

Val Trp Asn Gln Leu Leu Ser Gln Lys Arg Val Thr Asp Gln Leu Gly 195 200 205

Met Phe Thr His Lys Glu Phe Glu Gln Leu Ala Pro Val Leu Asp Gly 210 215 220

Phe Ser Leu Met Thr Tyr Asp Tyr Ser Thr Ala His Gln Pro Gly Pro 225 230 235 240

Asn Ala Pro Leu Ser Trp Val Arg Ala Cys Val Gln Val Leu Asp Pro 245 250 255

Lys Ser Lys Trp Arg Ser Lys Ile Leu Leu Gly Leu Asn Phe Tyr Gly

260 265 270

Met Asp Tyr Ala Thr Ser Lys Asp Ala Arg Glu Pro Val Val Gly Ala 275 280 285

Arg Tyr Ile Gln Thr Leu Lys Asp His Arg Pro Arg Met Val Trp Asp 290 295 300

Ser Gln Ala Ser Glu His Phe Phe Glu Tyr Lys Lys Ser Arg Ser Gly 310 315 320

Arg His Val Val Phe Tyr Pro Thr Leu Lys Ser Leu Gln Val Arg Leu 325 330 335

Glu Leu Ala Arg Glu Leu Gly Val Gly Val Ser Ile Trp Glu Leu Gly 340 345 350

Gln Gly Leu Asp Tyr Phe Tyr Asp Leu Leu 355

<210> 985

<211> 71

<212> PRT

<213> Homo sapiens

<400> 985

Met Val Gln Gly Pro Leu Thr His Leu Met Leu Val Leu Leu Ile Ser

Leu Ile Phe Leu Ser Arg Gly Ser Gly Arg Ala Trp Ala Phe Ser His
20 25 30

Ser Cys Phe Lys Thr Ser Asp Leu Leu Pro Cys Arg Asn Arg Trp Glu 35 40

Val Ile Glu Phe Leu His Tyr Ser Asn Leu His Ser His Ile Ser Leu 50 55 60

Ser Val Thr Lys Thr Phe Leu 65 70

<210> 986

<211> 230

<212> PRT

<213> Homo sapiens

<400> 986

Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu Leu 1 5 10 15

Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp Lys Thr 20 25 30

Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly Phe Ser Lys

Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly Ile Thr Gln Cys

50 55 60

Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala Asp Ile Gln Ala Ala 65 70 75 80

Gln Ala Met Met Val Thr Ser Ser Ala Ile Ser Ser Leu Ala Cys Ile 85 90 95

Ile Ser Val Val Gly Met Arg Cys Thr Val Phe Cys Gln Glu Ser Arg 100 105 110

Ala Lys Asp Arg Val Ala Val Ala Gly Gly Val Phe Phe Ile Leu Gly 115 120 125

.Gly Leu Leu Gly Phe Ile Pro Val Ala Trp Asn Leu His Gly Ile Leu 130 135 140

Gly Glu Ala Leu Tyr Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile 165 170 175

Ala Gly Ile Ile Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser 180 185 190

Asn Tyr Tyr Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser 195 200 205

Pro Arg Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr 210 215 220

Ser Leu Thr Gly Tyr Val 225 230

<210> 987

<211> 37

<212> PRT

<213> Homo sapiens

<400> 987

Met Cys Tyr Ile Pro Gly Ser Thr Gly Gly Gln Cys Trp Pro Trp Cys  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Trp Cys Trp Leu Cys Arg Glu Ala Leu Glu Trp Leu Cys Gly Ala Val 20 25 30

Ser Ala Gly Pro Ala 35

<210> 988

<211> 133

<212> PRT

<213> Homo sapiens

<400> 988

Met Arg Val Pro Leu Val Leu Ser Trp Ala Phe Val Leu Val Gly Phe

 1
 5
 10
 Trp
 Phe
 Pro
 Pro
 Ser
 Leu

 Cys
 Asp
 Leu
 Thr
 Ser
 Pro
 Pro
 Glu
 Ser
 Phe
 Trp
 Phe
 Pro
 Pro
 Leu

 Asp
 Leu
 Val
 Ser
 Met
 Glu
 Glu
 Leu
 Thr
 Asp
 Ser
 Arg
 Glu
 Phe
 Ser
 Asp
 Ser
 Arg
 Glu
 Thr
 Asp
 Leu
 Phe
 Phe
 Pro
 Val
 Ser
 Ser

 Gly
 Cys
 Phe
 Gln
 Glu
 Arg
 Arg
 Glu
 Thr
 Asp
 Leu
 Asp
 Leu
 Asp
 Ser
 Leu
 Leu

 Arg
 Cys
 Phe
 Gln
 Arg
 Asp
 Thr
 Ser
 Pro
 Leu
 Asp
 Gly
 Gln
 Trp

Ala Arg Val Arg Val Thr Lys Pro Pro Thr Thr Ala Thr Ala Ala Tyr 115 120 125

Asn Arg His Ile Arg 130

<210> 989 <211> 42 <212> PRT

<213> Homo sapiens

<400> 989

Met Phe Leu Phe Ile Thr Phe Thr Ile Leu Ala Ile Phe Ile Ile Glu
1 5 10 15

Pro Arg Asn Leu Arg Val Asp Leu Asn Leu Ile Lys Phe Gln Thr Ser 20 25 30

Trp Pro Lys Thr Leu Val Glu Glu Gln Asn 35

<210> 990 <211> 101 <212> PRT

<213> Homo sapiens

<400> 990

Met Ser Gln Leu Ser Arg Thr Ser Leu Ser Leu Leu Leu Thr Leu Leu 1 5 10

Val Leu Trp Gly Ser Ser Cys Cys Leu Pro Ile Trp Cys Leu Pro Asn 20 25 30

Arg His Arg Leu Leu Lys Leu Ser Phe Leu Leu Phe Ser Pro Asp Ile 35 40

Pro Tyr Leu Ser His Thr His Pro Asn Asn Ile Ser Cys Ser Val Leu

50 55 60

Ser Leu Arg Gln His Leu Asn Phe Thr Gln Pro Gly Ala Leu Phe Thr 65 70 75 80

Cys Leu Val Gln Ile Gln Phe Gly Leu Ile Leu Gln Pro Cys Ile Ser 85 90 95

Lys Trp Gly Leu Gly 100

<210> 991

<211> 201

<212> PRT

<213> Homo sapiens

<400> 991

Met Phe Phe Leu Gly Ala Val Leu Cys Leu Ser Phe Ser Trp Leu Phe 1 5 10 15

His Thr Val Tyr Cys His Ser Glu Lys Val Ser Arg Thr Phe Ser Lys 20 25 30

Leu Asp Tyr Ser Gly Ile Ala Leu Leu Ile Met Gly Ser Phe Val Pro 35 40

Trp Leu Tyr Tyr Ser Phe Tyr Cys Ser Pro Gln Pro Arg Leu Ile Tyr 50 55 60

Leu Ser Ile Val Cys Val Leu Gly Ile Ser Ala Ile Ile Val Ala Gln 65 70 75 80

Trp Asp Arg Phe Ala Thr Pro Lys His Arg Gln Thr Arg Ala Gly Val
85 90 95

Phe Leu Glý Leu Ser Gly Val Val Pro Thr Met His Phe Thr 100 105 110

Ile Ala Glu Gly Phe Val Lys Ala Thr Thr Val Gly Gln Met Gly Trp
115 120 125

Phe Phe Leu Met Ala Val Met Tyr Ile Thr Gly Ala Gly Leu Tyr Ala 130 135 140

Ala Arg Ile Pro Glu Arg Phe Pro Gly Lys Phe Asp Ile Trp Phe 145 150 155 160

Gln Ser His Gln Ile Phe His Val Leu Val Val Ala Ala Ala Phe Val
165 170 175

His Phe Tyr Gly Val Ser Asn Leu Gln Glu Phe Arg Tyr Gly Leu Glu 180 185 190

Gly Gly Cys Thr Asp Asp Thr Leu Leu 195 200

<210> 992

<211> 56 <212> PRT

<213> Homo sapiens

<400> 992

Met Phe Leu Lys Val Leu Val Phe Leu Ile Phe Phe Ser Pro Phe Ser 1 5 10 15

Ser Ser Leu Phe Ser Gly Glu Ala Val Arg Gly Arg Gly Ala Gly Leu  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Gly Leu Gly Ile Gly Arg Gly Trp Thr Ser Cys Leu Ser Val Leu Asn 35 40

Gly Cys Asp Gly Ala Arg Ser His 50 55

<210> 993

<211> 52

<212> PRT

<213> Homo sapiens

<400> 993

Met Gly Pro Cys Arg Ala Ser Arg Cys Leu Ser Leu Leu Val Leu Phe 1 5 10 15

Pro Pro Gly Val Ala Gly Arg Pro Ala Pro Gly Arg Leu His Pro Val  $20 \\ 25 \\ 30$ 

Pro Thr Gly Pro Leu Pro Arg Met Tyr Ser Ala Gly Ala Arg Gly Arg \$40\$

His Gly Ala His 50

<210> 994

<211> 73

<212> PRT

<213> Homo sapiens

<400> 994

Met Cys Trp Ile Cys Val Trp Leu Phe Phe Ser Pro Thr Lys Thr Ser 1 5 10 15

Cys Phe Pro Trp Leu Ile Arg Pro Gly Pro Arg Ser Phe Thr Asp Ser 20 25 30

His Gly Thr Pro Pro Trp Gln Cys Leu Glu Pro Ser Arg Phe Tyr Val 35 40 45

Pro Trp Glu Ala Ser Val Val Thr Phe Phe Ala Ala Gly Ser Ala Lys 50 55 60

Met Ser Cys Gln Ser Trp Leu Ala Pro 65 70

<210> 995 <211> 159 <212> PRT <213> Homo sapiens <400> 995 Met Ser Gln Ala Trp Val Pro Gly Leu Ala Pro Thr Leu Leu Phe Ser Leu Leu Ala Gly Pro Gln Lys Ile Ala Ala Lys Cys Gly Leu Ile Leu

Ala Cys Pro Lys Gly Phe Lys Cys Cys Gly Asp Ser Cys Cys Gln Glu

Asn Glu Leu Phe Pro Gly Pro Val Arg Ile Phe Val Ile Ile Phe Leu

Val Ile Leu Ser Val Phe Cys Ile Cys Gly Leu Ala Lys Cys Phe Cys

Arg Asn Cys Arg Glu Pro Glu Pro Asp Ser Pro Val Asp Cys Arg Gly

Pro Leu Glu Leu Pro Ser Ile Ile Pro Pro Glu Arg Val Arg Val Ser 105

Leu Ser Ala Pro Pro Pro Pro Tyr Ser Glu Val Ile Leu Lys Pro Ser

Leu Gly Pro Thr Pro Thr Glu Pro Pro Pro Pro Tyr Ser Phe Arg Pro 135

Glu Glu Tyr Thr Gly Asp Gln Arg Gly Ile Asp Asn Pro Ala Phe 150 155

<210> 996 <211> 50 <212> PRT <213> Homo sapiens

<400> 996

Met Asp Gly Gly Pro Gly Ala Phe Ser Arg Ala Trp Val Leu Gln Ile

Pro Trp Leu Leu Ser Gly Gly Asn Phe Ala Leu Cys Glu Pro Arg

Pro Cys Pro Ser Ala Gly His Pro Trp Gln Glu Ala Gly Leu Pro Ser

Ser Pro 50

<210> 997 <211> 151

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<212> PRT
<213> Homo sapiens
<400> 997
Met Arg Arg Leu Leu Val Thr Ser Leu Val Val Val Leu Leu Trp
Glu Ala Gly Ala Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val
Lys His Trp Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg
Val Val Glu Pro Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro
     50
                         55
Val Gln Lys Pro Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Gln
Gly Arg Gly Pro Ile Leu Pro Gly Thr Lys Ala Trp Met Glu Thr Glu
Asp Thr Leu Gly Arg Val Leu Ser Pro Glu Pro Asp His Asp Ser Leu
                                105
Tyr His Pro Pro Pro Glu Glu Asp Gln Gly Glu Glu Arg Pro Arg Leu
                           120
        115
Trp Val Met Pro Asn His Gln Val Leu Leu Gly Pro Glu Glu Asp Gln
Asp His Ile Tyr His Pro Gln
<210> 998
<211> 506
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (65)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (112)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (423)
<223> Xaa equals any amino acid
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<223> Xaa equals any amino acid

<220>
<221> SITE
<222> (425)

45

Met		Met			His									Leu 15	Gly
Ala	Ala	Gly			Glu									Ala	Val
Glu	Val	Thr	Glu	Gln	Glu	Thr	Lys	Val	Pro	Lys	Lys	Thr	Val	Ile	Ile

Glu Glu Thr Ile Thr Thr Val Val Lys Ser Pro Arg Gly Gln Arg Arg

40

35

- Xaa Pro Ser Lys Ser Pro Ser Arg Ser Pro Ser Arg Cys Ser Ala Ser 65 70 75 80
- Pro Leu Arg Pro Gly Leu Leu Ala Pro Asp Leu Leu Tyr Leu Pro Gly 85 90 95
- Ala Gly Gln Pro Arg Pro Glu Ala Glu Pro Gly Gln Lys Pro Xaa 100 105 110
- Val Pro Thr Leu Tyr Val Thr Glu Ala Glu Ala His Ser Pro Ala Leu 115 120 125
- Pro Gly Leu Ser Gly Pro Gln Pro Lys Trp Val Glu Val Glu Glu Thr 130 135 140
- Ile Glu Val Arg Val Lys Lys Met Gly Pro Gln Gly Val Ser Pro Thr 145 150 155 160
- Thr Glu Val Pro Arg Ser Ser Ser Gly His Leu Phe Thr Leu Pro Gly 165 170 175
- Ala Thr Pro Gly Gly Asp Pro Asn Ser Asn Asn Ser Asn Asn Lys Leú 180 185 190
- Leu Ala Gln Glu Ala Trp Ala Gln Gly Thr Ala Met Val Gly Val Arg 195 200 205
- Glu Pro Leu Val Phe Arg Val Asp Ala Arg Gly Ser Val Asp Trp Ala 210 215 220
- Ala Ser Gly Met Gly Ser Leu Glu Glu Glu Gly Thr Met Glu Glu Ala 225 230 235 240
- Gly Glu Glu Glu Gly Glu Asp Gly Asp Ala Phe Val Thr Glu Glu Ser 245 250 255
- Gln Asp Thr His Ser Leu Gly Asp Arg Asp Pro Lys Ile Leu Thr His 260 265 270
- Asn Gly Arg Met Leu Thr Leu Ala Asp Leu Glu Asp Tyr Val Pro Gly 275 280 285
- Glu Gly Glu Thr Phe His Cys Gly Gly Pro Gly Pro Gly Ala Pro Asp 290 295 300
- Asp Pro Pro Cys Glu Val Ser Val Ile Gln Arg Glu Ile Gly Glu Pro 305 310 315 320

Thr Val Gly Ser Leu Cys Cys Ser Ala Trp Gly Met His Trp Val Pro 325 330 335

Glu Ala Leu Ser Ala Ser Leu Gly Leu Ser Pro Val. Gly Arg His His 340 345 350

Arg Asp Pro Arg Ser Val Ala Leu Arg Ala Pro Pro Ser Ser Cys Gly 355 360 365

Arg Pro Arg Leu Gly Leu Trp Ala Val Leu Pro Gly Arg Ser Leu Ser 370 380

Ala Pro Ala Ser Gly Val Leu Arg Thr Val Ala Arg Ala Ala Ser Pro 385 390 395 400

Gln Ser Phe Pro Pro Arg Pro Ser Thr Ser Gly Gln Trp Gly Arg Arg 405 410 415

Ser Pro Phe Thr Ser Val Xaa Gly Xaa Gly Pro Ser Tyr Leu Thr Gln 420 425 430

Leu Gln Pro Gly Gly Leu Gly Gly Ala Cys Asn Val Gly Met Thr Gly
435 440 445

Ser Lys Thr Ser Ala Leu Gly Cys Phe Leu Ser Ala Trp Gln Glu Pro 450 455 460

Gln Asp Cys Gly Arg Arg Met Trp Pro Trp Ala Phe Val Leu Phe Pro 465 470 475 480

His Gly Pro Gly Pro Ser Leu Leu Ala Pro Ala Thr Ala Ala Arg Pro 485 490 495

Asp Met Ala Leu Pro Leu Leu Gln Ser Trp 500 505

<210> 999

<211> 522

<212> PRT

<213> Homo sapiens

<400> 999

Met Arg Leu Arg Val Arg Leu Leu Lys Arg Thr Trp Pro Leu Glu Val 1 5 10 15

Pro Glu Thr Glu Pro Thr Leu Gly His Leu Arg Ser His Leu Arg Gln
20 25 30

Ser Leu Leu Cys Thr Trp Gly Tyr Ser Ser Asn Thr Arg Phe Thr Ile  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Thr Leu Asn Tyr Lys Asp Pro Leu Thr Gly Asp Glu Glu Thr Leu Ala 50 60

Ser Tyr Gly Ile Val Ser Gly Asp Leu Ile Cys Leu Ile Leu Gln Asp 65 70 75 80

Asp Ile Pro Ala Pro Asn Ile Pro Ser Ser Thr Asp Ser Glu His Ser 85 90 95

Ser Leu Gln Asn Asn Glu Gln Pro Ser Leu Ala Thr Ser Ser Asn Gln 100 Thr Ser Met Gln Asp Glu Gln Pro Ser Asp Ser Phe Gln Gly Gln Ala Ala Gln Ser Gly Val Trp Asn Asp Asp Ser Met Leu Gly Pro Ser Gln Asn Phe Glu Ala Glu Ser Ile Gln Asp Asn Ala His Met Ala Glu Gly Thr Gly Phe Tyr Pro Ser Glu Pro Met Leu Cys Ser Glu Ser Val Glu 170 Gly Gln Val Pro His Ser Leu Glu Thr Leu Tyr Gln Ser Ala Asp Cys 185 Ser Asp Ala Asn Asp Ala Leu Ile Val Leu Ile His Leu Leu Met Leu 200 Glu Ser Gly Tyr Ile Pro Gln Gly Thr Glu Ala Lys Ala Leu Ser Met 215 Pro Glu Lys Trp Lys Leu Ser Gly Val Tyr Lys Leu Gln Tyr Met His 230 Pro Leu Cys Glu Gly Ser Ser Ala Thr Leu Thr Cys Val Pro Leu Gly Asn Leu Ile Val Val Asn Ala Thr Leu Lys Ile Asn Asn Glu Ile Arg 265 Ser Val Lys Arg Leu Gln Leu Leu Pro Glu Ser Phe Ile Cys Lys Glu Lys Leu Gly Glu Asn Val Ala Asn Ile Tyr Lys Asp Leu Gln Lys Leu 295 Ser Arg Leu Phe Lys Asp Gln Leu Val Tyr Pro Leu Leu Ala Phe Thr Arg Gln Ala Leu Asn Leu Pro Asp Val Phe Gly Leu Val Val Leu Pro 330 Leu Glu Leu Lys Leu Arg Ile Phe Arg Leu Leu Asp Val Arg Ser Val 345 Leu Ser Leu Ser Ala Val Cys Arg Asp Leu Phe Thr Ala Ser Asn Asp 360 Pro Leu Leu Trp Arg Phe Leu Tyr Leu Arg Asp Phe Arg Asp Asn Thr Val Arg Val Gln Asp Thr Asp Trp Lys Glu Leu Tyr Arg Lys Arg His Ile Gln Arg Lys Glu Ser Pro Lys Gly Arg Phe Val Met Leu Leu Pro

Ser Ser Thr His Thr Ile Pro Phe Tyr Pro Asn Pro Leu His Pro Arg 420 425 430

Pro Phe Pro Ser Ser Arg Leu Pro Pro Gly Ile Ile Gly Glu Tyr 435 440 445

Asp Gln Arg Pro Thr Leu Pro Tyr Val Gly Asp Pro Ile Ser Ser Leu 450 455 460

Ile Pro Gly Pro Gly Glu Thr Pro Ser Gln Phe Pro Pro Leu Arg Pro 465 470 475 480

Arg Phe Asp Pro Val Gly Pro Leu Pro Gly Pro Asn Pro Ile Leu Pro 485 490 495

Gly Arg Gly Gly Pro Asn Asp Arg Phe Pro Phe Arg Pro Ser Arg Gly 500 505 510

Arg Pro Thr Asp Gly Arg Leu Ser Phe Met 515 520

<210> 1000

<211> 45

<212> PRT

<213> Homo sapiens

<400> 1000

Met Leu Val Ser Leu Ile Ile Cys Leu Leu Leu Asp Leu Leu Asn Gln 1 5 10 15

Pro Ser Leu Leu Arg Asp Leu Ile Leu Lys Gln His Thr Gly Asn Pro  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

His Leu Ser Phe Pro Leu Lys Tyr Ser His Trp Met Gly 35 40 45

<210> 1001

<211> 186

<212> PRT

<213> Homo sapiens

<400> 1001

Met Arg Thr Leu Val Glu Leu Gly Pro Trp Ala Gly Asp Phe Gly Pro

Asp Leu Leu Thr Leu Leu Phe Leu Leu Phe Leu Ala His Gly Val
20 25 30

Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe 35 40 45

Leu Met Ala Glu Gln Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala 50 60

Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Met Arg Leu Cys Trp
65 70 75 80

Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln 85 90 95

Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Leu 100 105 110

Glu Ala Ala Cys Thr Phe Cys Phe His Leu Thr Leu Leu His Leu Arg 115 120 125

His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr 130 135 140

Val Thr Ala Tyr Thr Ala Gly Pro Phe Thr Ser Ala Phe Phe Asn Pro 145 150 155 160

Ala Leu Ala Ala Ser Val Thr Phe Ala Cys Ser Asp Thr Pro Tyr Trp 165 170 175

Ser Thr Cys Arg Cys Thr Gly Trp Ala Leu 180 185

<210> 1002

<211> 168

<212> PRT

<213> Homo sapiens

<400> 1002

Met Val Thr Phe Ile Thr Ala Thr Leu Trp Ile Ala Val Phe Ser Tyr
1 5 10 15

Ile Met Val Trp Leu Val Thr Ile Ile Gly Tyr Thr Leu Gly Ile Pro  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Asp Val Ile Met Gly Ile Thr Phe Leu Ala Ala Gly Gln Val Ser Arg 35 40 45

Leu His Gly Gln Pro Asn Cys Gly Glu Thr Arg Pro Trp Gly His Gly 50 55 60

Ser Leu Gln His His Arg Ser Asn Val Phe Asp Ile Leu Val Gly Leu 65 70 75 80

Gly Val Pro Trp Gly Leu Gln Thr Met Val Val Asn Tyr Gly Ser Thr \$90\$

Val Lys Ile Asn Ser Arg Gly Leu Val Tyr Ser Val Val Leu Leu Leu 100 105 110

Gly Ser Val Ala Leu Thr Val Leu Gly Ile His Leu Asn Lys Trp Arg 115 120 125

Leu Asp Arg Lys Leu Gly Val Tyr Val Leu Val Leu Tyr Ala Ile Phe 130 135 140

Leu Cys Phe Ser Ile Met Ile Glu Phe Asn Val Phe Thr Phe Val Asn 145 150 150 160

Leu Pro Met Cys Arg Glu Asp Asp 165

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<210> 1003
<211> 48
<212> PRT
<213> Homo sapiens
<400> 1003
Met Met Lys Tyr Phe Phe Asp Val Val Phe Leu Thr Phe Phe Leu
Val Phe Ser Leu Ser Ile Phe Leu Ser Asp Glu Glu Phe Pro Val Ser
Arg Thr Gln Asn Ile Gly Leu Cys His Phe Asn Pro Ser Phe Ser Glu
                             40
<210> 1004
<211> 43
<212> PRT
<213> Homo sapiens
<400> 1004
Met Asn Leu Ile Phe Arg Leu Pro Cys Ile Leu Leu Thr Cys Ile Tyr
Val Gln Gln Cys Val Cys Lys Tyr Ile Gly Thr Phe Leu Asn Arg Val
Cys Ala Met Cys Lys Gly Leu Leu Thr Val Lys
<210> 1005
<211> 75
<212> PRT
<213> Homo sapiens
<400> 1005
Met Gly Pro Leu Trp Gly Ala Pro Leu Arg Ala Trp Ala Ala Gly Ser
Val Gly Cys Pro Cys Cys Leu Ser Cys Ala Ser Pro Ser Ser Ile Ser
Ser Ala Gly Asp Pro Leu Ala Ser Cys Ser Thr Cys Gly Ser Thr Trp
Glu Ile Pro Leu Thr Trp Met Thr Met Asp His Leu Leu Val Arg Tyr
                        55
Tyr Leu Ser Gln Ala Arg Trp Cys Thr Thr Gly
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<210> 1006

<211> 187

<212> PRT

<213> Homo sapiens

<400> 1006

Met Val Ala Ala Thr Val Ala Ala Trp Leu Leu Leu Trp Ala Ala 1 5 10 ... 15

Ala Cys Ala Gln Glu Gln Asp Phe Tyr Asp Phe Lys Ala Val Asn 20 25 30

Ile Arg Gly Lys Leu Val Ser Leu Glu Lys Tyr Arg Gly Ser Val Ser 35 40 45

Leu Val Val Asn Val Ala Ser Glu Cys Gly Phe Thr Asp Gln His Tyr 50 55 60

Arg Ala Leu Gln Gln Leu Gln Arg Asp Leu Gly Pro His His Phe Asn 65 70 75 80

Val Leu Ala Phe Pro Cys Asn Gln Phe Gly Gln Gln Glu Pro Asp Ser 85 90 95

Asn Lys Glu Ile Glu Ser Phe Ala Arg Arg Thr Tyr Ser Val Ser Phe 100 105 110

Pro Met Phe Ser Lys Ile Ala Val Thr Gly Thr Gly Ala His Pro Ala 115 120 125

Phe Lys Tyr Leu Ala Gln Thr Ser Gly Lys Glu Pro Thr Trp Asn Phe 130 135 140

Trp Lys Tyr Leu Val Ala Pro Asp Gly Lys Val Val Gly Ala Trp Asp 145 150 155 160

Pro Thr Val Ser Val Glu Glu Val Arg Pro Gln Ile Thr Ala Leu Val 165 170 175

Arg Lys Leu Ile Leu Leu Lys Arg Glu Asp Leu 180 185

<210> 1007

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1007

Met Ser Gly Leu Ala Ala Ala Ala His Val Phe Arg Val Cys Leu Phe
1 5 10 15

Pro Leu Ser Trp Gly Ser Ser Lys Thr Thr Phe Ile His Gly Leu Ser 20 25 30

Ser Tyr Ile Ala Thr Pro Val Leu Asn Ser Ile Phe Ser Ser Trp Lys  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ser Arg Arg Lys Asp Thr Trp Thr Cys Leu Leu His Arg Leu Ser Ala 50 60

Phe Pro Ile Ser Arg Arg Arg Asn Phe Ala Leu Phe Ser His Ser 65 70 75 80

Cys Val Cys Ile Arg Ser Ser Ser Asp Asp Val Gly Pro Thr Met Tyr \$85\$ 90 95

Ser Phe Ser Val Pro Cys Arg Val Lys 100 105

<210> 1008

<211> 67

<212> PRT

<213> Homo sapiens

<400> 1008

Met Gly Ser Phe Leu His Pro Gln Trp His Leu Leu Ile Thr Phe Cys 1 5 10 15

Ala Val Leu Gly Lys Gly Leu His Ser Asp Pro Ser Arg Pro Phe Glu 20 25 30

His Gly Gly Ala Leu Gly Lys Val Pro Arg Gly Arg Ser Thr Leu Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Ser Lys Glu Val Leu Leu Thr Leu Pro Pro Cys Leu His Val Ser Val 50 55 60

Gly Arg Lys 65

<210> 1009

<211> 52

<212> PRT

<213> Homo sapiens

<400> 1009

Met Lys Cys Phe Phe Leu Phe Val Val Ile Leu Ile Ile Met Lys Ser 1 5 10 15

Asn Leu Ser Asp Ile Ile Ile Ala Thr Tyr Thr Tyr Cys Ile Pro Asp 20 25 30

Tyr Phe Phe His Thr Phe Ile Phe Asn Leu Ser Val Tyr Leu Asn Ser 35 40 45

Lys Phe Ile Ser 50

<210> 1010

<211> 188

<212> PRT

<213> Homo sapiens

 <400> 1010
 Met Asp Val Asn Ile Ala Pro Leu Arg Ala Trp Asp Asp Phe Phe Pro 15
 Pro 16
 Pro 15
 Pro 16
 Pro 15
 Pro 16
 Pro 15
 Pro 16
 Pro 17
 Pro 18
 Pro 18
 Pro 18
 Pro 18
 Pro 18
 Pro 19
 Pro 19

Asn Arg Leu Thr Asp Tyr Ile Ser Lys Val Lys Glu 180 185

<210> 1011 <211> 742 <212> PRT <213> Homo sapiens

<400> 1011

Met Ala Val Arg Glu Leu Cys Phe Pro Arg Gln Arg Gln Val Leu Phe 1 5 10 15

Leu Phe Leu Phe Trp Gly Val Ser Leu Ala Gly Ser Gly Phe Gly Arg 20 25 30

Tyr Ser Val Thr Glu Glu Thr Glu Lys Gly Ser Phe Val Val Asn Leu  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ala Lys Asp Leu Gly Leu Ala Glu Gly Glu Leu Ala Ala Arg Gly Thr
50 60

Arg Val Val Ser Asp Asp Asn Lys Gln Tyr Leu Leu Leu Asp Ser His 65 70 75 80

Thr Gly Asn Leu Leu Thr Asn Glu Lys Leu Asp Arg Glu Lys Leu Cys 85 90 Gly Pro Lys Glu Pro Cys Met Leu Tyr Phe Gln Ile Leu Met Asp Asp Pro Phe Gln Ile Tyr Arg Ala Glu Leu Arg Val Arg Asp Ile Asn Asp 120 His Ala Pro Val Phe Gln Asp Lys Glu Thr Val Leu Lys Ile Ser Glu Asn Thr Ala Glu Gly Thr Ala Phe Arg Leu Glu Arg Ala Gln Asp Pro Asp Gly Gly Leu Asn Gly Ile Gln Asn Tyr Thr Ile Ser Pro Asn Ser 165 170 Phe Phe His Ile Asn Ile Ser Gly Gly Asp Glu Gly Met Ile Tyr Pro Glu Leu Val Leu Asp Lys Ala Leu Asp Arg Glu Glu Gln Gly Glu Leu 200 Ser Leu Thr Leu Thr Ala Leu Asp Gly Gly Ser Pro Ser Arg Ser Gly Thr Ser Thr Val Arg Ile Val Val Leu Asp Val Asn Asp Asn Ala Pro 230 235 Gln Phe Ala Gln Ala Leu Tyr Glu Thr Gln Ala Pro Glu Asn Ser Pro Ile Gly Phe Leu Ile Val Lys Val Trp Ala Glu Asp Val Asp Ser Gly 265 Val Asn Ala Glu Val Ser Tyr Ser Phe Phe Asp Ala Ser Glu Asn Ile 280 Arg Thr Thr Phe Gln Ile Asn Pro Phe Ser Gly Glu Ile Phe Leu Arg 295 Glu Leu Leu Asp Tyr Glu Leu Val Asn Ser Tyr Lys Ile Asn Ile Gln Ala Met Asp Gly Gly Gly Leu Ser Ala Arg Cys Arg Val Leu Val Glu Val Leu Asp Thr Asn Asp Asn Pro Pro Glu Leu Ile Val Ser Ser Phe 340 345 Ser Asn Ser Val Ala Glu Asn Ser Pro Glu Thr Pro Leu Ala Val Phe 360 Lys Ile Asn Asp Arg Asp Ser Gly Glu Asn Gly Lys Met Val Cys Tyr Ile Gln Glu Asn Leu Pro Phe Leu Lys Pro Ser Val Glu Asn Phe Tyr Ile Leu Ile Thr Glu Gly Ala Leu Asp Arg Glu Ile Arg Ala Glu

405 410 Tyr Asn Ile Thr Ile Thr Val Thr Asp Leu Gly Thr Pro Arg Leu Lys 425 Thr Glu His Asn Ile Thr Val Leu Val Ser Asp Val Asn Asn Asn Ala 440 Pro Ala Phe Thr Gln Thr Ser Tyr Thr Leu Phe Val Arg Glu Asn Asn Ser Pro Ala Leu His Ile Gly Ser Val Ser Ala Thr Asp Arg Asp Ser Gly Thr Asn Ala Gln Val Thr Tyr Ser Leu Leu Pro Pro Gln Asp Pro 490 His Leu Pro Leu Ala Ser Leu Val Ser Ile Asn Ala Asp Asn Gly His Leu Phe Ala Leu Arg Ser Leu Asp Tyr Glu Ala Leu Gln Ala Phe Glu 520 Phe Arg Val Gly Ala Thr Asp Arg Gly Ser Pro Ala Leu Asn Ser Glu Ala Leu Gly Ala Arg Ala Gly Ala Gly Arg Gln Arg Gln Leu Ala Leu 550 555 Arg Ala Val Pro Ala Ala Glu Arg Leu Arg Ala Leu His Arg Ala Gly Ala Pro Gly Gly Arg Ala Gly Leu Pro Gly Asp Gln Gly Gly Gly Gly Arg Arg Leu Gly Pro Glu Arg Leu Ala Val Val Pro Ala Ala Gln 600 Gly His Gly Ala Arg Ala Val Arg Cys Val Gly Ala Gln Trp Gly Gly 615 Ala His Arg Gln Ala Ala Glu Arg Ala Arg Arg Ser Gln Ala Gln Ala 635 Gly Gly Ala Cys Gln Gly Gln Trp Arg Ala Ser Ser Leu Gly His Arg His Ala Ala Arg Ala Pro Gly Gly Arg Leu Leu Pro Ala Leu Pro Ala 665 Ser Pro Gly Gly Pro Gly Pro Gly Pro Gly Arg Leu Ala His Arg Leu Pro Gly Gly Val Gly Leu Gly Val Phe Ala Leu Pro Pro Leu Gly Ala Pro Val Arg Gly Gly Ala Ala Val Gln Glu Glu Gln Gly Gly

Leu Gly Gly Ser Leu Leu Gly Ala Arg Gly Ser Phe Ser Arg Ala Ser

Gly Gly Arg Glu Gly Arg 740

<210> 1012

<211> 165

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (127)

<223> Xaa equals any amino acid

<400> 1012

Met Cys Leu Ser Leu Leu Ala Ala Leu Ala Cys Ser Ala Gly Asp Thr 1 5 10 15

Trp Ala Ser Glu Val Gly Pro Val Leu Ser Lys Ser Ser Pro Arg Leu 20 25 30

Ile Thr Thr Trp Glu Lys Val Pro Val Gly Thr Asn Gly Gly Val Thr 35 40 45

Val Val Gly Leu Val Ser Ser Leu Leu Gly Gly Thr Phe Val Gly Ile 50 55 60

Ala Tyr Phe Leu Thr Gln Leu Ile Phe Val Asn Asp Leu Asp Ile Ser 65 70 75 80

Ala Pro Gin Trp Pro Ile Ile Ala Phe Gly Gly Leu Ala Gly Leu Leu 85 90 95

Gly Ser Ile Val Asp Ser Tyr Leu Gly Ala Thr Met Gln Tyr Thr Gly 100 105 110

Leu Asp Glu Ser Thr Gly Met Val Val Asn Ser Pro Thr Asn Xaa Ala 115 120 125

Arg His Ile Ala Gly Lys Pro Ile Leu Asp Asn Asn Ala Val Asn Leu 130 \$135\$ 140

Phe Ser Ser Val Leu Ile Ala Leu Leu Leu Pro Thr Ala Ala Trp Gly 145 150 155 160

Phe Trp Pro Arg Gly 165

<210> 1013

<211> 62

<212> PRT

<213> Homo sapiens

<400> 1013

Met Thr Trp Thr Lys Cys Pro Leu Pro Leu Gly Pro Ala Phe Phe Thr 1 5 10 15

Gln Cys Cys Leu Ile Gly Leu Leu Val Pro Leu Gly Trp Gly Asn

Gln Asn Thr Gln Trp Tyr Pro Thr Ser Lys Met Pro Asp Leu Lys Asp 40 45

Ser Lys Thr Thr Asp Leu Cys Gln His Val Lys His Met Val 50 60

<210> 1014

<211> 46

<212> PRT

<213> Homo sapiens

<400> 1014

Met Ile His Arg Ala Arg Ser Leu Ala Ala Leu Ser Ser Leu Met Leu

1 10 15

Tyr Thr Lys Leu Val Gln Pro Val Ala Cys Ile Ser His Val Ala Gln 20 25 30

Asp Gly Phe Glu Tyr Gly Pro Thr Gln Ile His Lys Leu Ser 35 40 45

<210> 1015

<211> 41

<212> PRT

<213> Homo sapiens

<400> 1015

Met Ser Gly Ala Trp Gly Ser Gly Phe Ala Gly Ala Leu Trp Ser Met
1 10 15

Gly Leu Cys Ala Ser Ser Val Trp Gly Asn Ser Trp Asp Ile Asp Phe 20 25 30

Cys Pro Arg Asp Ser His Gly Glu Trp 35 40

<210> 1016

<211> 310

<212> PRT

<213> Homo sapiens

<400> 1016

Met Ala Leu Arg Arg Pro Pro Arg Leu Arg Leu Cys Ala Arg Leu Pro 1 5 10 15

Asp Phe Phe Leu Leu Leu Phe Arg Gly Cys Leu Ile Gly Ala Val 20 25 30

Asn Leu Lys Ser Ser Asn Arg Thr Pro Val Val Gln Glu Phe Glu Ser

Val Glu Leu Ser Cys Ile Ile Thr Asp Ser Gln Thr Ser Asp Pro Arg

50 55 60

Ile Glu Trp Lys Lys Ile Gln Asp Glu Gln Thr Thr Tyr Val Phe Phe 65 70 75 80

Asp Asn Lys Ile Gln Gly Asp Leu Ala Gly Arg Ala Glu Ile Leu Gly 85 90 95

Lys Thr Ser Leu Lys Ile Trp Asn Val Thr Arg Arg Asp Ser Ala Leu 100 105 110

Tyr Arg Cys Glu Val Val Ala Arg Asn Asp Arg Lys Glu Ile Asp Glu 115 120 125

Ile Val Ile Glu Leu Thr Val Gln Val Lys Pro Val Thr Pro Val Cys 130 140

Arg Val Pro Lys Ala Val Pro Val Gly Lys Met Ala Thr Leu His Cys 145 150 155 160

Gln Glu Ser Glu Gly His Pro Arg Pro His Tyr Ser Trp Tyr Arg Asn 165 170 175

Asp Val Pro Leu Pro Thr Asp Ser Arg Ala Asn Pro Arg Phe Arg Asn 180 185 190

Ser Ser Phe His Leu Asn Ser Glu Thr Gly Thr Leu Val Phe Thr Ala 195 200 205

Val His Lys Asp Asp Ser Gly Gln Tyr Tyr Cys Ile Ala Ser Asn Asp 210 215 220

Ala Gly Ser Ala Arg Cys Glu Glu Glu Glu Met Glu Val Tyr Asp Leu 225 230 235 240

Asn Ile Gly Gly Ile Ile Gly Gly Val Leu Val Val Leu Ala Val Leu 245 250 255

Ala Leu Ile Thr Leu Gly Ile Cys Cys Ala Tyr Arg Arg Gly Tyr Phe  $260 \hspace{1.5cm} 265 \hspace{1.5cm} 270 \hspace{1.5cm}$ 

Ile Asn Asn Lys Gln Asp Gly Glu Ser Tyr Lys Asn Pro Gly Lys Pro 275 280 285

Asp Gly Val Asn Tyr Ile Arg Thr Asp Glu Glu Gly Asp Phe Arg His 290 295 300

Lys Ser Ser Phe Val Ile 305 310

<210> 1017

<211> 51

<212> PRT

<213> Homo sapiens

<400> 1017

Met Ile Lys His Val Ala Trp Leu Ile Phe Thr Asn Cys Ile Phe Phe
1 5 10 15

Cys Pro Val Ala Phe Phe Ser Phe Ala Pro Leu Ile Thr Ala Ile Ser 20 25 30

Ile Ser Pro Glu Ile Met Lys Ser Val Thr Leu Ile Phe Pro Cys  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Leu Leu Ala 50

<210> 1018

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1018

Met Thr Lys Ala Arg Leu Phe Arg Leu Trp Leu Val Leu Gly Ser Val 1 5 10 15

Phe Met Ile Leu Leu Ile Ile Val Tyr Trp Asp Ser Ala Ala Pro Arg \$20\$

Thr Ser Thr Cys Thr Arg Pro Ser Leu Gly Arg Thr Arg Gly Arg Arg 35 40 45

Cys Pro Arg Pro Gly Arg Thr Gly Gln Gly Ala His Gly Arg Leu Arg 50 60

Cys Arg Arg Val Ser Gly Gln Phe Leu Met Leu Ala 65 70 75

<210> 1019

<211> 84

<212> PRT

<213> Homo sapiens

<400> 1019

Met Lys Gly Trp Gly Trp Leu Ala Leu Leu Gly Ala Leu Leu Gly 1 5 10

Thr Ala Trp Ala Arg Arg Ser Gln Asp Leu His Cys Gly Ala Cys Arg  $20 \\ 25 \\ 30$ 

Ala Leu Val Asp Glu Leu Glu Trp Glu Ile Ala Gln Val Asp Pro Lys
35 40 45

Lys Thr Ile Gln Met Gly Ser Phe Arg Ile Asn Pro Asp Gly Ser Gln 50 60

Ser Val Val Glu Val Thr Val Thr Val Pro Pro Asn Lys Val Ala His 65 70 75 80

Ser Gly Phe Gly

<210> 1020

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1020

Met Gly Ser Ala Ala Leu Glu Ile Leu Gly Leu Val Leu Cys Leu Val 1 5 10 15

Gly Trp Gly Gly Leu Ile Leu Ala Cys Gly Leu Pro Met Trp Gln Val 20 25 30

Thr Ala Phe Leu Asp His Asn Ile Val Thr Ala Gln Thr Trp Lys
35 40 45

Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr Gly Thr Cys Ser Ala 50 60

Lys Cys Thr Thr Arg Cys Trp Leu 65 70

<210> 1021

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1021

Met Cys Tyr Leu Leu Leu Leu Ile Gln Thr Ala Glu Leu Leu Ile 1 5 10 15

His Pro Gln Gly Leu Gln Ala Val Ser Asn Gly Glu Ser Ala Leu Lys 20 25 30

Gly Thr Arg Pro Thr Phe Ser Ser Pro Phe Ile Leu Val Thr Glu Gly 35 40 45

Arg Lys Glu Trp Glu Gly Val Phe Leu Ser Ser Gly Trp Lys Gly Asn 50 60

Thr Leu Ser Asn Tyr Tyr Ile Ser Leu Val Phe Tyr Tyr Ser Arg Ile 65 70 75 80

Leu Gln Pro Tyr Phe Tyr Cys Leu Trp Gly Lys Leu Glu Met Val Thr 85 90 95

Leu Ile Arg Ser Val Trp Arg Gly Ile Asn Gly Gly Asp Lys Ile Ser 100 105 110

Val Gly Phe Gly Lys Cys 115

<210> 1022

<211> 45

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any amino acid

<400> 1022

Met Lys Lys Ser Leu Glu Asn Leu Asn Arg Leu Gln Val Met Leu Leu 1 5 10 15

His Leu Thr Ala Ala Phe Leu Gln Arg Ala His Xaa Ile Leu Thr Thr 20 25 30

Arg Met Ser Leu Gly Phe Gln Ser Pro His Leu Thr Met 35 40 45

<210> 1023

<211> 18

<212> PRT

<213> Homo sapiens

<400> 1023

Pro Gly Pro His Cys Phe Ile Gly Leu Ala Met Arg Leu Tyr Tyr Gly
1 5 10 15

Ser Arg

<210> 1024

<211> 169

<212> PRT

<213> Homo sapiens

<400> 1024

Met Trp Ala Val Leu Arg Leu Ala Leu Arg Pro Cys Ala Arg Ala Ser 1 5 10 15

Pro Ala Gly Pro Arg Ala Tyr His Gly Asp Ser Val Ala Ser Leu Gly 20 25 30

Thr Gln Pro Asp Leu Gly Ser Ala Leu Tyr Gln Glu Asn Tyr Lys Gln 35 40 45

Met Lys Ala Leu Val Asn Gln Leu His Glu Arg Val Glu His Ile Lys 50 60

Leu Gly Gly Glu Lys Ala Arg Ala Leu His Ile Ser Arg Gly Lys 65 70 75 80

Leu Leu Pro Arg Glu Arg Ile Asp Asn Leu Ile Asp Pro Gly Ser Pro
85 90 95

Phe Leu Glu Leu Ser Gln Phe Ala Gly Tyr Gln Leu Tyr Asp Asn Glu 100 105 110

Glu Val Pro Gly Gly Gly Ile Ile Thr Gly Ile Gly Arg Val Ser Gly
115 120 125

Val Glu Cys Met Ile Ile Ala Asn Asp Ala Thr Val Lys Gly Gly Ala 130 135 140

Tyr Tyr Pro Val Thr Val Lys Lys Gln Leu Arg Ala Gln Glu Ile Ala 145 150 155 160

Met Gln Thr Gly Ser Pro Ala Ser Thr 165

- <210> 1025
- <211> 178
- <212> PRT
- <213> Homo sapiens
- <220>
- <221> SITE
- <222> (157)
- <223> Xaa equals any amino acid
- <220>
- <221> SITE
- <222> (170)
- <223> Xaa equals any amino acid
- <220>
- <221> SITE
- <222> (171)
- <223> Xaa equals any amino acid
- <220>
- <221> SITE
- <222> (177)
- <223> Xaa equals any amino acid
- <400> 1025
- Met Ala Ala Pro Arg Gly Arg Ala Ala Pro Trp Thr Thr Ala Leu Leu
  1 5 10 15
- Leu Leu Leu Ala Ser Gl<br/>n Val Leu Ser Pro Gly Ser Cys Ala Asp Glu 20 25 30
- Glu Glu Val Pro Glu Glu Trp Val Leu Leu His Val Val Gln Gly Gln 35 40 45
- Ile Val Leu Arg Met Arg Ser Leu Lys Gly Asp Ala Asp Leu Tyr Val 65 70 75 80
- Ser Ala Ser Ser Leu His Pro Ser Phe Asp Asp Tyr Glu Leu Gln Ser 85 90 95
- Ala Thr Cys Gly Pro Asp Ala Val Ser Ile Pro Ala His Phe Arg Arg 100 105 110
- Pro Val Gly Ile Gly Val Tyr Gly His Pro Ser His Leu Glu Ser Glu 115 120 125
- Phe Glu Met Lys Val Tyr Tyr Asp Gly Thr Val Glu Gln His Pro Phe 130 135 140

Gly Glu Ala Ala Tyr Pro Ala Asp Gly Gln Met Pro Xaa Arg Ser Thr 145 150 155 160

Leu Val Pro Arg Lys Thr Pro Arg Lys Xaa Xaa Asn Leu Phe Ser Gly
165 170 175

Xaa Tyr

<210> 1026

<211> 8

<212> PRT

<213> Homo sapiens

<400> 1026

Thr Ala Ile Phe Phe Leu Leu Val

<210> 1027

<211> 47

<212> PRT

<213> Homo sapiens

<400> 1027

Met Thr Ala Gly Phe Met Gly Met Ala Val Ala Ile Ile Leu Phe Gly
1 5 10 15

Trp Ile Ile Gly Val Leu Gly Cys Cys Trp Asp Arg Gly Leu Met Gln 20 25 30

Tyr Val Ala Gly Cys Ser Ser Ser Trp Glu Gly Lys Gln Trp Asn 35 40 45 .

<210> 1028

<211> 203

<212> PRT

<213> Homo sapiens

<400> 1028

Met Gln Leu Gly Ser Val Leu Leu Thr Arg Cys Pro Phe Trp Gly Cys

1 10 15

Phe Ser Gln Leu Met Leu Tyr Ala Glu Arg Ala Glu Ala Arg Arg Lys 20 25 30

Pro Asp Ile Pro Val Pro Tyr Leu Tyr Phe Asp Met Gly Ala Ala Val 35 40 45

Leu Cys Ala Ser Phe Met Ser Phe Gly Val Lys Arg Arg Trp Phe Ala 50 60

Leu Gly Ala Ala Leu Gln Leu Ala Ile Ser Thr Tyr Ala Ala Tyr Ile 65 70 75 80

Gly Gly Tyr Val His Tyr Gly Asp Trp Leu Lys Val Arg Met Tyr Ser 85 90 95

Arg Thr Val Ala Ile Ile Gly Gly Phe Leu Val Leu Ala Ser Gly Ala 100 105 110

Gly Glu Leu Tyr Arg Arg Lys Pro Arg Ser Arg Ser Leu Gln Ser Thr 115 120 125

Gly Gln Val Phe Leu Gly Ile Tyr Leu Ile Cys Val Ala Tyr Ser Leu 130 135 140

Gln His Ser Lys Glu Asp Arg Leu Ala Tyr Leu Asn His Leu Pro Gly 145 150 155 160

Gly Glu Leu Met Ile Gln Leu Phe Phe Val Leu Tyr Gly Ile Leu Ala 165 170 175

Pro Gly Leu Ser Val Arg Leu Leu Arg Asp Pro Arg Cys Pro Asp Pro 180 185 190

Gly Cys Thr Ala Ala Pro Cys His Ala Ala His 195 200

<210> 1029

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1029

Met Val His Ile Asn Arg Ala Leu Lys Leu Ile Ile Arg Leu Phe Leu 1 5 10 15

Val Glu Asp Leu Val Asp Ser Leu Lys Leu Ala Val Phe Met Trp Leu 20 25 30

Met Thr Tyr Val Gly Ala Val Phe Asn Gly Ile Thr Leu Leu Ile Leu 35 40 45

Ala Glu Leu Leu Ile Phe Ser Val Pro Ile Val Tyr Glu Lys Tyr Lys
50 55 60

Thr Gln Ile Asp His Tyr Val Gly Ile Ala Arg Asp Gln Thr Lys Ser 65 70 75 80

Ile Val Glu Lys Ile Gln Ala Lys Leu Pro Gly Ile Ala Lys Lys Lys 85 90 95

Ala Glu

<210> 1030

<211> 392

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (251)

<223> Xaa equals any amino acid

<400> 1030

Met Ala Pro Trp Pro Pro Lys Gly Leu Val Pro Ala Val Leu Trp Gly
1 5 10 15

Leu Ser Leu Phe Leu Asn Leu Pro Gly Pro Ile Trp Leu Gln Pro Ser 20 25 30

Pro Pro Pro Gln Ser Ser Pro Pro Pro Gln Pro His Pro Cys His Thr 35 40 45

Cys Arg Gly Leu Val Asp Ser Phe Asn Lys Gly Leu Glu Arg Thr Ile 50 55 60

Arg Asp Asn Phe Gly Gly Gly Asn Thr Ala Trp Glu Glu Glu Asn Leu 65 70 75 80

Ser Lys Tyr Lys Asp Ser Glu Thr Arg Leu Val Glu Val Leu Glu Gly 85 90 95

Val Cys Ser Lys Ser Asp Phe Glu Cys His Arg Leu Leu Glu Leu Ser 100 105 110

Glu Glu Leu Val Glu Ser Trp Trp Phe His Lys Gln Gln Glu Ala Pro 115 120 125

Asp Leu Phe Gln Trp Leu Cys Ser Asp Ser Leu Lys Leu Cys Cys Pro 130 135 140

Ala Gly Thr Phe Gly Pro Ser Cys Leu Pro Cys Pro Gly Gly Thr Glu 145 150 155 160

Arg Pro Cys Gly Gly Tyr Gly Gln Cys Glu Gly Glu Gly Thr Arg Gly 165 170 175

Gly Ser Gly His Cys Asp Cys Gln Ala Gly Tyr Gly Glu Ala Cys 180 185 190

Gly Gln Cys Gly Leu Gly Tyr Phe Glu Ala Glu Arg Asn Ala Ser His 195 200 205

Leu Val Cys Ser Ala Cys Phe Gly Pro Cys Ala Arg Cys Ser Gly Pro 210 215 220

Glu Glu Ser Asn Cys Leu Gln Cys Lys Lys Gly Trp Ala Leu His His 225 230 235 240

Leu Lys Cys Val Asp Cys Ala Lys Ala Cys Xaa Gly Cys Met Gly Ala 245 250 255

Gly Pro Gly Arg Cys Lys Cys Ser Pro Gly Tyr Gln Gln Val Gly 260 265 270

Ser Lys Cys Leu Asp Val Asp Glu Cys Glu Thr Glu Val Cys Pro Gly 275 280 285

Glu Asn Lys Gln Cys Glu Asn Thr Glu Gly Gly Tyr Arg Cys Ile Cys 290 295 300

Ala Glu Gly Tyr Lys Gln Met Glu Gly Ile Cys Val Lys Glu Gln Ile 305 310 315 320

Pro Glu Ser Ala Gly Phe Phe Ser Glu Met Thr Glu Asp Glu Leu Val 325 330 335

Val Leu Gln Gln Met Phe Phe Gly Ile Ile Ile Cys Ala Leu Ala Thr 340 345 350

Leu Ala Ala Lys Gly Asp Leu Val Phe Thr Ala Ile Phe Ile Gly Ala 355 360 . 365

Val Ala Ala Met Thr Gly Tyr Trp Leu Ser Glu Arg Ser Asp Arg Val 370 380

Leu Glu Gly Phe Ile Lys Gly Arg 385 390

<210> 1031

<211> 434

<212> PRT

<213> Homo sapiens

<400> 1031

Met Ala Pro Glu Gly Leu Val Pro Ala Val Leu Trp Gly Leu Ser Leu 1 5 10 15

Phe Leu Asn Leu Pro Gly Pro Ile Trp Leu Gln Pro Ser Pro Pro Pro 20 25 30

Gln Ser Ser Pro Pro Pro Gln Pro His Pro Cys His Thr Cys Arg Gly 35 40 45

Leu Val Asp Ser Phe Asn Lys Gly Leu Glu Arg Thr Ile Arg Asp Asn 50 60

Phe Gly Gly Gly Asn Thr Ala Trp Glu Glu Glu Asn Leu Ser Lys Tyr 65 70 75 80

Lys Asp Ser Glu Thr Arg Leu Val Glu Val Leu Glu Gly Val Cys Ser 85 90 95

Lys Ser Asp Phe Glu Cys His Arg Leu Leu Glu Leu Ser Glu Glu Leu 100 105 110

Val Glu Ser Trp Trp Phe His Lys Gln Gln Glu Ala Pro Asp Leu Phe 115 120 125

Gln Trp Leu Cys Ser Asp Ser Leu Lys Leu Cys Cys Pro Ala Gly Thr 130 135 140

Phe Gly Pro Ser Cys Leu Pro Cys Pro Gly Gly Thr Glu Arg Pro Cys 145 150 155 · 160

Gly Gly Tyr Gly Gln Cys Glu Gly Glu Gly Thr Arg Gly Gly Ser Gly 165 170 175

His Cys Asp Cys Gln Ala Gly Tyr Gly Glu Ala Cys Gly Gln Cys

180 185 190

Gly Leu Gly Tyr Phe Glu Ala Glu Arg Asn Ala Ser His Leu Val Cys 195 200 205

Ser Ala Cys Phe Gly Pro Cys Ala Arg Cys Ser Gly Pro Glu Glu Ser 210 215 220

Asn Cys Leu Gln Cys Lys Lys Gly Trp Ala Leu His His Leu Lys Cys 225 230 235 240

Val Asp Ile Asp Glu Cys Gly Thr Glu Gly Ala Asn Cys Gly Ala Asp 245 250 255

Gln Phe Cys Val Asn Thr Glu Gly Ser Tyr Glu Cys Arg Asp Cys Ala 260 265 270

Lys Ala Cys Leu Gly Cys Met Gly Ala Gly Pro Gly Arg Cys Lys Lys 275 280 285

Cys Ser Pro Gly Tyr Gln Gln Val Gly Ser Lys Cys Leu Asp Val Asp 290 295 300

Glu Cys Glu Thr Glu Val Cys Pro Gly Glu Asn Lys Gln Cys Glu Asn 305 310 315 320

Thr Glu Gly Gly Tyr Arg Cys Ile Cys Ala Glu Gly Tyr Lys Gln Met 325 330 335

Glu Gly Ile Cys Val Lys Glu Gln Ile Pro Gly Ala Phe Pro Ile Leu 340 345 350

Thr Asp Leu Thr Pro Glu Thr Thr Arg Arg Trp Lys Leu Gly Ser His 355 360 365

Pro His Ser Thr Tyr Val Lys Met Lys Met Gln Arg Asp Glu Ala Thr 370 375 380

Phe Pro Gly Leu Tyr Gly Lys Gln Val Ala Lys Leu Gly Ser Gln Ser 385 390 395 400

Arg Gln Ser Asp Arg Gly Thr Arg Leu Ile His Val Ile Asn Ala Leu 405 410 415

Pro Pro Thr Cys Pro Pro Gln Lys Lys Lys Lys Lys Lys Lys Gly 420 425 430

Gly Arg

<210> 1032

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1032

Met His Asp Gly Ser Lys Pro Phe Pro Arg Tyr Gly Tyr Lys Pro Ser  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Pro Pro Asn Gly Cys Gly Ser Pro Leu Phe Gly Val His Leu Asn Ile 20 25 30

Gly Ile Pro Ser Leu Thr Lys Cys Cys Asn Gln His Asp Arg Cys Tyr 35 40 45

Glu Thr Cys Gly Lys Ser Lys Asn Asp Cys Asp Glu Glu Phe Gln Tyr 50 55 60

Cys Leu Ser Lys Ile Cys Arg Asp Val Gln Lys Thr Leu Gly Leu Thr 65 70 75 80

Gln His Val Gln Ala Cys Glu Thr Thr Val Glu Leu Leu Phe Asp Ser 85 90 95

Val Ile His Leu Gly Cys Lys Pro Tyr Leu Asp Ser Gln Arg Ala Ala 100 \$105\$

Cys Arg Cys His Tyr Glu Glu Lys Thr Asp Leu 115 120

<210> 1033

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1033

Met Leu Arg Cys Gly Gly Arg Gly Leu Leu Gly Leu Ala Val Ala 1 5 10 15

Ala Ala Val Met Ala Ala Arg Leu Met Gly Trp Trp Gly Pro Arg 20 25 30

Ala Gly Phe Arg Leu Phe Ile Pro Glu Glu Leu Ser Arg Tyr Arg Gly 35 40 45

Gly Pro Gly Asp Pro Gly Leu Tyr Leu Ala Leu Leu Gly Arg Val Tyr 50 60

Asp Val Ser Ser Gly Arg Ser Thr Thr Ser Leu Gly Pro Thr Ile Ala 65 70 75 80

Ala Ser Gln Ala Glu Thr His Pro Glu Leu Ser 85 90

<210> 1034

<211> 189

<212> PRT

<213> Homo sapiens

<400> 1034

Met Gly Pro Val Arg Leu Gly Ile Leu Leu Phe Leu Phe Leu Ala Val 1 5 10 15

His Glu Ala Trp Ala Gly Met Leu Lys Glu Glu Asp Asp Asp Thr Glu 20 25 30

Arg Leu Pro Ser Lys Cys Glu Val Cys Lys Leu Leu Ser Thr Glu Leu 35 40 45

- Gln Ala Glu Leu Ser Arg Thr Gly Arg Ser Arg Glu Val Leu Glu Leu 50 55 60
- Gly Gln Val Leu Asp Thr Gly Lys Arg Lys Arg His Val Pro Tyr Ser 65 70 75 80
- Val Ser Glu Thr Arg Leu Glu Glu Ala Leu Glu Asn Leu Cys Glu Arg 85 90 95
- Ile Leu Asp Tyr Ser Val His Ala Glu Arg Lys Gly Ser Leu Arg Tyr 100 105 110
- Ala Lys Gly Gln Ser Gln Thr Met Ala Thr Leu Lys Gly Leu Val Gln 115 120 125
- Lys Gly Val Lys Val Asp Leu Gly Ile Pro Leu Glu Leu Trp Asp Glu 130 135 140
- Glu Glu Glu Glu Glu Glu Glu Gly Gly Asp Lys Met Thr 165 170 175
- Lys Thr Gly Ser His Pro Lys Leu Asp Arg Glu Asp Leu 180 185
- <210> 1035
- <211> 23
- <212> PRT
- <213> Homo sapiens
- <400> 1035
- Leu Gly Ser Leu Ser Thr Ala Pro Ser Ser Ala Leu Pro Thr Leu Gly
  1 5 10 15
- Ala Arg Arg Thr Arg Ser Lys 20
- <210> 1036
- <211> 196
- <212> PRT
- <213> Homo sapiens
- <220>
- <221> SITE
- <222> (171)
- <223> Xaa equals any amino acid
- <220>
- <221> SITE
- <222> (175)
- <223> Xaa equals any amino acid

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<220>
<221> SITE
<222> (177)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (181)
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<222> (185)
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<221> SITE
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<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (189)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (193)
<223> Xaa equals any amino acid
Met Ser Leu Leu Val Asp Gly Asp Met Asn Leu Ser Ile Ile Met Thr
                                     10
Ile Ser Ser Thr Leu Leu Ala Leu Val Leu Met Pro Leu Cys Leu Trp
Ile Tyr Ser Trp Ala Trp Ile Asn Thr Pro Ile Val Gln Leu Leu Pro
Leu Gly Thr Val Thr Leu Thr Leu Cys Ser Thr Leu Ile Pro Ile Gly
Leu Gly Val Phe Ile Arg Tyr Lys Tyr Ser Arg Val Ala Asp Tyr Ile
Val Lys Val Ser Leu Trp Ser Leu Leu Val Thr Leu Val Val Leu Phe
                                      90
Ile Met Thr Gly Thr Met Leu Gly Pro Glu Leu Leu Ala Ser Ile Pro
                                105
Ala Ala Val Tyr Val Ile Ala Ile Phe Met Pro Leu Ala Gly Tyr Ala
Ser Gly Tyr Gly Leu Ala Thr Leu Phe His Leu Pro Pro Asn Cys Lys
                        135
Arg Thr Val Cys Leu Glu Thr Gly Ser Gln Asn Val Gln Leu Cys Thr
145
                    150
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!

Ala Ile Leu Lys Leu Ala Phe His Arg Ile Xaa Arg Lys His Xaa His 165 170 175

Xaa Ser Phe Ala Xaa Cys Thr Phe Xaa Val Cys Xaa Xaa Gly Asp Phe 180 185 190

Xaa Phe Asn Leu 195

<210> 1037

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1037

Met Ala Leu Gly Ser Met Tyr Leu Val Leu Thr Leu Ile Val Ala Lys

1 10 15

Val Leu Arg Gly Ala Glu Pro Cys Cys Gly Pro Leu Lys Asn Arg Val 20 25 30

Leu Arg Pro Cys Pro Leu Pro Val His Cys Pro Leu Pro Ile Pro Ser 35 40 45

Pro Ala Glu Gly Ile Pro Trp Val Ala Tyr Leu Pro Ile Arg Trp Phe 50 55 60

Ile Ser Cys Cys Pro Gly His Cys Ile Gln Ile Pro Met Cys Thr Ser 65 70 75 80

<210> 1038

<211> 60

<212> PRT

<213> Homo sapiens

<400> 1038

Met Gly Asn Cys Gln Ala Gly His Asn Leu His Leu Cys Leu Ala His
1 5 10 15

His Pro Pro Leu Val Cys Ala Thr Leu Ile Leu Leu Leu Gly Leu 20 25 30

Ser Gly Leu Gly Leu Gly Ser Phe Leu Leu Thr His Arg Thr Gly Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Arg Thr Leu Thr Ser Pro Arg Thr Gly Ser Leu Phe 50 55 60

<210> 1039

<211> 130

<212> PRT

<213> Homo sapiens

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<220>
<221> SITE
<222> (64)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (65)
<223> Xaa equals any amino acid
<400> 1039
Met Leu Met Pro Val His Phe Leu Leu Leu Leu Leu Leu Leu Gly
Gly Pro Arg Thr Gly Leu Pro His Lys Phe Tyr Lys Ala Lys Pro Ile
Phe Ser Cys Leu Asn Thr Ala Leu Ser Glu Ala Glu Lys Gly Gln Trp
Glu Asp Ala Ser Leu Leu Ser Lys Arg Ser Phe His Tyr Leu Arg Xaa
Xaa Thr Pro Leu Arg Glu Arg Arg Arg Arg Ala Lys Arg Lys Arg Leu
Ser Pro Ser Leu Gly Pro Gly Val Glu Pro Glu Ala Pro Gly Thr Asp
Thr Cys Pro Lys His Ser Pro Gly Glu Ser His Ala Arg Thr Arg Pro
Arg Val Pro Thr Ala Pro Ser Ser Pro Cys Pro Ser Thr Ser Pro Pro
                           120
Thr Ser
   130
<210> 1040
<211> 173
<212> PRT
<213> Homo sapiens
<400> 1040
Met Glu Ala Pro Gly Pro Arg Ala Leu Arg Thr Ala Leu Cys Gly Gly
Cys Cys Cys Leu Leu Cys Ala Gln Leu Ala Val Ala Gly Lys Gly
Ala Arg Gly Phe Gly Arg Gly Ala Leu Ile Arg Leu Asn Ile Trp Pro
Ala Val Gln Gly Ala Cys Lys Gln Leu Glu Val Cys Glu His Cys Val
Glu Gly Asp Arg Ala Arg Asn Leu Ser Ser Cys Met Trp Glu Gln Cys
                                         75
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Arg Pro Glu Glu pro Gly His Cys Val Ala Gln Ser Glu Val Val Lys 85 90 95

Glu Gly Cys Ser Ile Tyr Asn Arg Ser Glu Ala Cys Pro Ala Ala His 100 \$105\$

His His Pro Thr Tyr Glu Pro Lys Thr Val Thr Thr Gly Ser Pro Pro 115 120 125

Val Pro Glu Ala His Ser Pro Gly Phe Asp Gly Ala Ser Phe Ile Gly 130 135 140

Gly Val Val Leu Val Leu Ser Leu Gln Ala Val Ala Phe Phe Val Leu 145 150 155 160

His Phe Leu Lys Ala Lys Asp Ser Thr Tyr Gln Thr Leu 165 170

<210> 1041

<211> 210

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (139)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (187)

<223> Xaa equals any amino acid

<400> 1041

Met Glu Ala Pro Gly Pro Arg Ala Leu Arg Thr Ala Leu Cys Gly Gly
1 5 10 15

Ala Arg Gly Phe Gly Arg Gly Ala Leu Ile Arg Leu Asn Ile Trp Pro 35 40 45

Ala Val Gln Gly Ala Cys Lys Gln Leu Glu Val Cys Glu His Cys Val 50 60

Glu Gly Asp Arg Ala Arg Asn Leu Ser Ser Cys Met Trp Glu Gln Cys 65 70 75 80

Arg Pro Glu Glu Pro Gly His Cys Val Ala Gln Ser Glu Val Val Lys 85 90 95

Glu Gly Cys Ser Ile Tyr Asn Arg Ser Glu Ala Cys Pro Ala Ala His 100 105 110

His His Pro Thr Tyr Glu Pro Lys Thr Val Thr Thr Gly Ser Pro Pro 115 120 125

Val Pro Glu Ala His Ser Pro Gly Phe Asp Xaa Ala Ser Phe Ile Gly Gly Val Val Leu Val Leu Ser Leu Gln Ala Val Ala Phe Phe Val Leu Thr Ser Ser Arg Pro Arg Thr Ala Pro Thr Arg Arg Cys Glu Tyr Leu Ala Ser Ser Lys Tyr Leu Ser Pro Ser Ser Xaa Leu Val Pro Ala His Val Pro Phe Ser Thr Gln Gly Ala Val Phe Ser Thr Gly Lys Pro Ser 200 205 Gly Arg 210 <210> 1042 <211> 111 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (108) <223> Xaa equals any amino acid Met Arg Arg Leu Leu Leu Ala Leu Pro Phe Ala Leu Leu Pro Leu Ala 10 Val Ala His Ala His Glu Asp His Asp His Glu His Gly Ser Leu Gly Ala His Glu His Gly Val Gly Arg Leu Asn Ala Val Leu Asp Gly Gln Ala Leu Glu Leu Glu Leu Asp Ser Pro Ala Met Asn Leu Val Gly Phe Glu His Val Ala Thr Ser Ala Ala Asp Lys Ala Lys Val Ala Ala Val Arg Lys Gln Leu Glu Asn Pro Ser Gly Pro Val Gln Pro Ala Gln Ser Arg Ser Cys Val Val Ser Asn Gln Gly Ile Asn Xaa Arg Cys Ser 100 105 <210> 1043 <211> 99 <212> PRT

<400> 1043

<213> Homo sapiens

Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser

15 10 Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys Lys Gly Glu Ala Gly Arg Pro Gly Arg Arg Gly Arg Pro Gly Leu Lys Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Arg Ser Pro Trp His Pro Gly Asn <210> 1044 <211> 245 <212> PRT <213> Homo sapiens <400> 1044 Met Glu Gly Pro Arg Gly Trp Leu Val Leu Cys Val Leu Ala Ile Ser Leu Ala Ser Met Val Thr Glu Asp Leu Cys Arg Ala Pro Asp Gly Lys Lys Gly Glu Ala Gly Arg Pro Gly Arg Arg Gly Arg Pro Gly Leu Lys Gly Glu Gln Gly Glu Pro Gly Ala Pro Gly Ile Arg Thr Gly Ile Gln Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly Asn Pro Gly Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala Arg Gly Ile Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile Lys Asp Gln Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro Met Gly Gly Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu Glu Pro Tyr

Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly Tyr Tyr Tyr

Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu Ser Ile Val

165

155

170

Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe Cys Asp Thr 185 Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met Val Leu Gln Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro Lys Lys Gly His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser Gly Phe Leu 230 235 Ile Phe Pro Ser Ala 245 <210> 1045 <211> 105 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (70) <223> Xaa equals any amino acid <400> 1045 Met Ile Ser Tyr Ile Val Leu Leu Ser Ile Leu Leu Trp Pro Leu Val Val Tyr His Glu Leu Ile Gln Arg Met Tyr Thr Arg Leu Glu Pro Leu Leu Met Gln Leu Asp Tyr Ser Met Lys Ala Glu Ala Asn Ala Leu His 40 His Lys His Asp Lys Arg Lys Arg Gln Gly Lys Asn Ala Pro Pro Gly Gly Asp Glu Pro Leu Xaa Glu Thr Glu Ser Glu Ser Glu Ala Glu Leu 70 · Ala Gly Phe Ser Pro Val Val Asp Val Lys Lys Thr Ala Leu Ala Leu Ala Ile Tyr Arg Leu Arg Ala Val Arg 100 <210> 1046 <211> 89 <212> PRT <213> Homo sapiens <220> <221> SITE

<222> (24)

<223> Xaa equals any amino acid

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<220>
<221> SITE
<222> (75)
<223> Xaa equals any amino acid
<400> 1046
Met Phe Lys Asp Tyr Pro Pro Ala Ile Lys Pro Ser Tyr Asp Val Leu
Leu Leu Leu Leu Leu Val Xaa Leu Leu Gln Ala Gly Leu Asn Thr
                                25
Gly Thr Ala Ile Gln Cys Val Arg Phe Lys Val Ser Ala Arg Leu Gln
Gly Ala Ser Trp Asp Thr Gln Asn Gly Pro Gln Glu Arg Leu Ala Gly
Glu Val Ala Arg Ser Pro Leu Lys Glu Phe Xaa Lys Glu Lys Ala Trp
                                       75
Arg Ala Val Val Gln Met Ala Gln
<210> 1047
<211> 27
<212> PRT
<213> Homo sapiens
<40.0> 1047
Met His Gln Leu Phe Gly Leu Phe Val Thr Leu Met Phe Ala Ser Val
Gly Gly Leu Gly Gly Ile Ile Leu Val Leu
            20
<210> 1048
<211> 54
<212> PRT
<213> Homo sapiens
Leu Ala Ala Thr Arg Lys Phe Phe Leu Ser Ser His Ser Ser Ser Cys
Lys Lys Gly Ala Met Ser Gln Lys Glu Ala Pro Phe His Arg Gln Arg
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50

<210> 1049

Gly Arg Asn Trp Val Gln

Leu His Arg Glu Arg Gly Asn Arg Arg Leu Gly Asn Gly Glu Trp

PCT/US02/08277

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WO 03/038063
<211> 127
<212> PRT
<213> Homo sapiens
<400> 1049
Met Gly Gln Val Trp Arg Val Pro Pro Leu Leu Ser Val Gln Val
Phe Leu Thr Met Ala His Ala Phe His Gln Ala Pro Glu Leu Gln Trp
Leu Gly Leu Trp Phe Trp Val Arg Leu Phe Ala Gly Gly Asp Gly Gly
                             40
Leu His Leu Asn Ile Ser Ser Val Thr Leu Pro Leu Leu His Gly Lys
Gln Leu Ser Arg Glu Val Pro Ser Cys Gln Gly Lys Pro Arg Leu Gly
Arg Pro Pro Tyr Lys Glu Pro Gln Asp Cys Ser His Gly Cys His Leu
Ser Trp Lys Gly Arg Phe Met Gly Phe Pro Gly Thr Pro Arg Leu Ser
                               105
Trp Pro Arg Gly Lys Arg Trp Leu Leu Gln Glu Phe Asp Leu Ser
                        120
       115
<210> 1050
<211> 9
<212> PRT
<213> Homo sapiens
<400> 1050
Leu Gly Lys Pro Trp Arg Tyr Pro Thr
<210> 1051
<211> 91
<212> PRT
<213> Homo sapiens
<220>
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<221> SITE <222> (84)

<223> Xaa equals any amino acid

<400> 1051

Met Tyr Gly Lys Ser Ser Thr Arg Ala Val Leu Leu Leu Gly Ile

Gln Leu Thr Ala Leu Trp Pro Ile Ala Ala Val Glu Ile Tyr Thr Ser

Arg Val Leu Glu Ala Val Asn Gly Thr Asp Ala Arg Leu Lys Cys Thr 40

Phe Ser Ser Phe Ala Pro Val Gly Asp Ala Leu Thr Val Thr Trp Asn 50 60

Phe Arg Pro Leu Asp Gly Gly Pro Glu Gln Phe Val Phe Tyr Tyr His 65 70 75 80

Ile Asp Pro Xaa Pro Thr His Glu Trp Ala Val 85 90

<210> 1052

<211> 158

<212> PRT

<213> Homo sapiens

<400> 1052

Met Thr Thr Met Ala Pro Val Gly Leu Gln Thr Arg Ile Pro Trp Leu
1 5 10 15

Leu Cys Leu Gly Pro Pro Pro Gly Pro Cys Cys Pro Leu Ser Pro Thr 20 25 30

Ser Thr Leu Pro His Thr Pro Thr Ala Arg Ser Leu His Pro Thr Met 35 40 45

Ser Phe His Leu Thr Pro Met Val Gly Ala Val Pro Ala Ala Ser Ile 50 55 60

Val Arg Ala Ala Gly Ala Val Gly Arg His Gly Val Met Gly Gln 65 70 75 80

Gly Ala Arg Gly Gly Pro Arg Ser Gly Pro Pro Ser Pro Ser Pro Ala 85 90 95

Val Ala Val Ser Leu Ser Pro Pro Ala Glu Gly Ala Ala Phe Gly Gly 100 105 110

Val Gly Lys Gln Val Gly Leu Ala Met Gly Ala Leu Leu His Pro Glu 115 120 125

Ala Gln Leu Gly Val Pro Leu Ile Ser Glu Pro Thr Gln Gly Ser Ile 130 135 140

<210> 1053

<211> 106

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (26)

<223> Xaa equals any amino acid

<400> 1053

Pro Thr Phe Ser Asp Gln Tyr Leu Ala Pro His Pro Tyr Ser Pro Gln
1 5 10 15

Pro Pro Pro Tyr His Glu Leu Pro His Xaa His Gly Gln Ser Gln Arg 20 25 30

Val Leu Cys Gly Cys Tyr Val Ala His Cys Gly Ala Arg Leu Gly Arg
35 40 45

Ala Leu Leu Val Cys Asp Trp Val Ser Trp Pro Ser Cys Ala Cys Ser 50 60

Tyr Ser Ala Trp Ala Gln Pro Thr Ser Cys Cys His Thr Gly Asp Cys 65 70 75 80

Gly His Cys Asp Ser His Gln Gln Cys Leu Val Pro Pro Ser Leu 85 90 95

Arg Gly Arg Gln Gly Thr Phe Asp Tyr Phe 100 105

<210> 1054

<211> 244

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (231)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (237)

<223> Xaa equals any amino acid

<400> 1054

Met Arg Ala Pro Phe Asn Thr Leu Phe Gly Arg Leu Phe Gly Leu Leu 1 5 10 15

Leu Val Ala Ile Val Leu Ala His Val Leu Ala Phe Phe Trp Phe His 20 25 30

His Tyr Gly Pro Pro Pro Pro Arg Ala Ala Phe Val Glu Gln Pro 35 40 45

Asp Gly Ser Leu Thr Pro Leu Arg Lys Ala Pro Arg Pro Trp Phe Gly 50 55 60

Gly Pro Val Val Pro Leu Thr Phe Gln Phe Ile Ser Leu Ile Ile Ala 65 70 75 80

Ala Trp Tyr Gly Ala Lys Leu Leu Ser Arg Pro Ile Gln Arg Leu Ser 85 90 95

Ala Ala Glu Arg Leu Ser Val Asp Leu Asp Ser Pro Pro Leu Val

Glu Thr Gly Pro Arg Glu Ala Arg Gln Ala Ala Ser Thr Phe Asn Leu

. 115 120 125

Met Gln Lys Arg Ile Arg Glu Gln Val Ser Gln Arg Ala Arg Met Leu 130 135 140

Gly Ala Val Ser His Asp Leu Arg Thr Pro Leu Ser Arg Leu Lys Leu 145 150 155 160

Arg Leu Glu Gln Ile Glu Asp Pro Lys Leu Gln Gly Gln Met Arg Gln 165 170 175

Asp Leu Asp Asp Met Ile Gly Met Leu Asp Ala Thr Leu Ser Tyr Leu 180 185 190

His Glu Gln Arg Thr Ser Glu Thr Arg His Trp Leu Asp Val Gln Ala 195 200 205

Leu Val Glu Ser Leu Ser Glu Asn Ala Gln Asp Gln Gly Arg Asp Val 210 215 220

Gln Phe Phe Phe Gly Gly Xaa Pro Pro Gly Gly Gly Xaa Pro Lys Thr 225 230 235 240

Pro Pro Pro Phe

<210> 1055

<211> 244

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (25)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (40)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (41)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (43)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (231)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (237)

<223> Xaa equals any amino acid

<400> 1055

Met Arg Ala Pro Phe Asn Thr Leu Phe Gly Arg Leu Phe Gly Leu Leu 1 5 10 15

Leu Val Ala Ile Val Leu Ala His Xaa Leu Ala Phe Phe Trp Phe His 20 25 30

His Tyr Gly Pro Pro Pro Pro Xaa Xaa Ala Xaa Phe Val Glu Gln Pro 35 40 45

Asp Gly Ser Leu Thr Pro Leu Arg Lys Ala Pro Arg Pro Trp Phe Gly 50 60

Gly Pro Val Val Pro Leu Thr Phe Gln Phe Ile Ser Leu Ile Ile Ala 65 70 75 80

Ala Trp Tyr Gly Ala Lys Leu Leu Ser Arg Pro Ile Gln Arg Leu Ser 85 90 95

Ala Ala Ala Glu Arg Leu Ser Val Asp Leu Asp Ser Pro Pro Leu Val 100 \$105  $$110^{\circ}$$ 

Glu Thr Gly Pro Arg Glu Ala Arg Gln Ala Ala Ser Thr Phe Asn Leu 115 120 125

Met Gln Lys Arg Ile Arg Glu Gln Val Ser Gln Arg Ala Arg Met Leu 130 135 140

Gly Ala Val Ser His Asp Leu Arg Thr Pro Leu Ser Arg Leu Lys Leu 145 150 155 160

Arg Leu Glu Gln Ile Glu Asp Pro Lys Leu Gln Gly Gln Met Arg Gln 165 170 175

Asp Leu Asp Asp Met Ile Gly Met Leu Asp Ala Thr Leu Ser Tyr Leu 180 185 190

His Glu Gln Arg Thr Ser Glu Thr Arg His Trp Leu Asp Val Gln Ala 195 200 205

Leu Val Glu Ser Leu Ser Glu Asn Ala Gln Asp Gln Gly Arg Asp Val 210 215 220

Gln Phe Phe Phe Gly Gly Xaa Pro Pro Gly Gly Gly Xaa Pro Lys Thr 225 230 235 240

Pro Pro Pro Phe

<210> 1056

<211> 413

<212> PRT

<213> Homo sapiens

<400> 1056

Met Arg Arg Gly Cys Ala Val Leu Gly Ala Leu Gly Leu Leu Ala Gly
1 5 10 15

Ala	Gly	Val	Gly 20	Ser	Trp	Leu	Leu	Val 25	Leu	Tyr	Leu	Суѕ	Pro 30	Ala	Ala
Ser	Gln	Pro 35	Ile	Ser	Gly	Thr	Leu 40	Gln	Asp	Glu	Glu	Ile 45	Thr	Leu	Ser
Cys	Ser 50	Glu	Ala	Ser	Ala	Glu 55	Glu	Ala	Leu	Leu	Pro 60	Ala	Leu	Pro	Lys
Thr 65	Val	Ser	Phe	Arg	Ile 70	Asn	Ser	Glu	Asp	Phe 75	Leu	Leu	Glu	Ala	Gln 80
Val	Arg	Asp	Gln	Pro 85	Arg	Trp	Leu	Leu	Val 90	Cys	His	Glu	Gly	Trp 95	Ser
Pro	Ala	Leu	Gly 100	Leu	Gln	Ile	Суѕ	Trp 105	Ser	Leu	Gly	His	Leu 110	Arg	Leu
Thr	His	His 115	Lys	Gly	Val	Asn	Leu 120	Thr	Asp	Ile	Lys	Leu 125	Asn	Ser	Ser
Gln	Glu 130	Phe	Ala	Gln	Leu	Ser 135	Pro	Arg	Leu	Gly	Gly 140	Phe	Leu	Glu	Glu
Ala 145	Trp	Gln	Pro	Arg	Asn 150	Asn	Суѕ	Thr	Ser	Gly 155	Gln	Val	Val	Ser	Leu 160
Arg	Cys	Ser	Glu	Cys 165	Gly	Ala	Arg	Pro	Leu 170	Ala	Ser	Arg	Ile	Val 175	Gly
Gly	Gln	Ser	Val 180	Ala	Pro	Gly	Arg	Trp 185	Pro	Trp.	Gln	Ala	Ser 190	Val	Ala
Leu	Gly	Phe 195	Arg	His	Thr	Cys	Gly 200	Gly	Ser	Val	Leu	Ala 205	Pro	Arg	Trp
Val	Val 210	Thr	Ala	Ala	His	Cys 215	Met	His	Ser	Phe	Arg 220	Leu	Ala	Arg	Leu
Ser 225	Ser	Trp	Arg	Val	His 230	Ala	Gly	Leu	Val	Ser 235	His	Ser	Ala	Val	Arg 240
Pro	His	Gln	Gly	Ala 245	Leu	Val	Glu	Arg	Ile 250	Ile	Pro	His	Pro	Leu 255	Tyr
Ser	Ala	Gln	Asn 260	His	Asp	Tyr	Asp	Va1 265	Ala	Leu	Leu	Arg	Leu 270	Gln	Thr
Ala	Leu	Asn 275	Phe	Ser	Asp	Thr	Val 280	Gly	Ala	Val	Cys	Leu 285	Pro	Ala	Lys
Glu	Gln 290	His	Phe	Pro	Lys	Gly 295	Ser	Arg	Cys	Trp	Val 300	Ser	Gly	Trp	Gly
His 305	Thr	His	Pro	Ser	His 310	Thr	Tyr	Ser	Ser	Asp 315	Met	Leu	Gln	Asp	Thr 320
Val	Val	Pro	Leu	Phe 325	Ser	Thr	Gln	Leu	Cys 330	Asn	Ser	Ser	Cys	Val 335	Tyr

Ser Gly Ala Leu Thr Pro Arg Met Leu Cys Ala Gly Tyr Leu Asp Gly 340 345 350

Arg Ala Asp Ala Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Cys Pro 355 360 365

Asp Gly Asp Thr Trp Arg Leu Val Gly Val Val Ser Trp Gly Arg Gly 370 375 380

Cys Ala Glu Pro Asn His Pro Gly Val Tyr Ala Lys Val Ala Glu Phe 385 390 395 400

Leu Asp Trp Ile His Asp Thr Ala Gln Asp Ser Leu Leu 405 410

<210> 1057

<211> 941

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (807)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (809)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (815)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (819)

<223> Xaa equals any amino acid

<400> 1057

Met Val Phe Leu Pro Leu Lys Trp Ser Leu Ala Thr Met Ser Phe Leu
1 5 10 15

Leu Ser Ser Leu Leu Ala Leu Leu Thr Val Ser Thr Pro Ser Trp Cys
20 25 30

Gln Ser Thr Glu Ala Ser Pro Lys Arg Ser Asp Gly Thr Pro Phe Pro 35 40

Trp Asn Lys Ile Arg Leu Pro Glu Tyr Val Ile Pro Val His Tyr Asp 50 55 60

Leu Leu Ile His Ala Asn Leu Thr Thr Leu Thr Phe Trp Gly Thr Thr 65 70 75 80

Lys Val Glu Ile Thr Ala Ser Gln Pro Thr Ser Thr Ile Ile Leu His
85 90 95

Ser	His	His	Leu 100	Gln	Ile	Ser	Arg	Ala 105	Thr	Leu	Arg	Lys	Gly 110	Ala	Gly
Glu	Arg	Leu 115	Ser	Glu	Glu	Pro	Leu 120	Gln	Val	Leu	Glu	His 125	Pro	Pro	Glr
Glu	Gln 130	Ile	Ala	Leu	Leu	Ala 135	Pro	Glu	Pro	Leu	Leu 140	Val	Gly	Leu	Pro
Туг 145	Thr	Val	Val	Ile	His 150	Tyr	Ala	Gly	Asn	Leu 155	Ser	Glu	Thr	Phe	His 160
Gly	Phe	Tyr	Lys	Ser 165	Thr	Tyr	Arg	Thr	Lys 170	Glu	Gly	Glu	Leu	Arg 175	Il€
Leu	Ala	Ser	Thr 180	Gln	Phe	Glu	Pro	Thr 185	Ala	Ala	Arg	Met	Ala 190	Phe	Pro
Cys	Phe	Asp 195	Glu	Pro	Ala	Phe	Lys 200	Ala	Ser	Phe	Ser	Ile 205	Lys	Ile	Arg
Arg	Glu 210	Pro	Arg	His	Leu	Ala 215	Ile	Ser	Asn	Met	Pro 220	Leu	Val	Lys	Ser
Val 225	Thr	Val	Ala	Glu	Gly 230	Leu	Ile	Glu	Asp	His 235	Phe	Asp	Val	Thr	Val 240
Lys	Met	Ser	Thr	Tyr 245	Ļeu	Val	Ala	Phe	Ile 250	Ile	Ser	Asp	Phe	Glu 255	Ser
Val	Ser	Lys	Ile 260	Thr	Lys	Ser	Gly	Val 265	Lys	Val	Ser	Val	Tyr 270	Ala	Val
Pro	Asp	Lys 275	Met	Asn	Gln	Ala	Asp 280	Tyr	Ala	Leu	Asp	Ala 285	Ala	Val	Thr
Leu	Leu 290	Glu	Phe	Tyr	Glu	Asp 295	Tyr	Phe	Ser	Ile	Pro 300	Tyr	Pro	Leu	Pro
Lys 305	Gln	Asp	Leu	Ala	Ala 310	Ile	Pro	qaA	Phe	Gln 315	Ser	Gly	Ala	Met	Glu 320
Asn	Trp	Gly	Leu	Thr 325	Thr	Tyr	Arg	Glu	Ser 330	Ala	Leu	Leu	Phe	Asp 335	Ala
Glu	Lys	Ser	Ser 340	Ala	Ser	Ser	Lys	Leu 345	Gly	Ile	Thr	Met	Thr 350	Val	Ala
His	Glu	Leu 355	Ala	His	Gln	Trp	Phe 360	Gly	Asn	Leu	Val	Thr 365	Met	Glu	Trp
Trp	Asn 370	Asp	Leu	Trp	Leu	Asn 375	Glu	Gly	Phe	Ala	Lys 380	Phe	Met	Glu	Phe
Val 385	Ser	Val	Ser	Val	Thr 390	His	Pro	Glu	Leu	Lys 395	Val	Gly	Asp	Tyr	Phe 400
Phe	Gly	Lys	Cys	Phe 405	Asp	Ala	Met	Glu	Val 410	Asp	Ala	Leu	Asn	Ser 415	Ser
His	Pro	Val	Ser	Thr	Pro	Val	Glu	Asn	Pro	Ala	Gln	Ile	Arg	Glu	Met

				420					425					430		
E	he	Asp	Asp 435	Val	Ser	Tyr	Asp	Lys 440	Gly	Ala	Cys	Ile	Leu 445	Asn	Met	Leu
P	arg	Glu 450	Tyr	Leu	Ser	Ala	Asp 455	Ala	Phe	Lys	Ser	Gly 460	Ile	Val	Gln	Tyr
	eu 165	Gln	Lys	His	Ser	Туг 470	Lys	Asn	Thr	Lys	Asn 475	Glu	Asp	Leu	Trp	Asp 480
2	er	Met	Ala	Ser	Ile 485	Суѕ	Pro	Thr	Asp	Gly 490	Val	Lys	Gly	Met	Asp 495	Gly
F	he	Суѕ	Ser	Arg 500	Ser	Gln	His	Ser	Ser 505	Ser	Ser	Ser	His	Trp 510	His	Gln
G	lu	Gly	Val 515	Asp	Val	Lys	Thr	Met 520	Met	Asn	Thr	Trp	Thr 525	Leu	Gln	Arg
G	ly	Phe 530	Pro	Leu	Ile	Thr	Ile 535	Thr	Val	Arg	Gly	Arg 540	Asn	Val	His	Met
	ys 45	Gln	Glu	His	Туr	Met 550	Lys	Gly	Ser	Asp	Gly 555	Ala	Pro	Asp	Thr	Gly 560
7	Уr	Leu	Trp	His	Val 565	Pro	Leu	Thr	Phe	Ile 570	Thr	Ser	Lys	Ser	Asp 575	Met
V	al.	His	Arg	Phe 580	Leu	Leu	Lys	Thr	Lys 585	Thr	Asp	Val	Leu	Ile 590	Leu	Pro
G	lu	Glu	Val 595	Glu	Trp	Ile	Lys	Phe 600	Asn	Val	Gly	Met	Asn 605	Gly	Tyr	Tyr
I	le	Val 610	His	Tyr	Glu	Asp	Asp 615	Gly	Trp	Asp	Ser	Leu 620	Thr	Gly	Leu	Leu
	ys 25	Gly	Thr	His	Thr	Ala 630	Val	Ser	Ser	Asn	Asp 635	Arg	Ala	Ser	Leu	Ile 640
					645					650					Glu 655	
P	la	Leu	Asp	Leu 660	Ser	Leu	Tyr	Leu	Lys 665	His	Glu	Thr	Glu	Ile 670	Met	Pro
V	al	Phe	Gln 675	Gly	Leu	Asn	Glu	Leu 680	Ile	Pro	Met	Tyr	Lys 685	Leu	Met	Glu
I	ys.	Arg 690	Asp	Met	Asn	Glu	Val 695	Glu	Thr	Gln	Phe	Lys 700	Ala	Phe	Leu	Ile
	rg '05	Leu	Leu	Arg	Asp	Leu 710	Ile	Asp	Lys	Gln	Thr 715	Trp	Thr	Asp	Glu	Gly 720
S	er	Val	Ser	Glu	Arg 725	Met	Leu	Arg	Ser	Glu 730	Leu	Leu	Leu	Leu	Ala 735	Cys
٧	al	His	Asn	Tyr 740	Gln	Pro	Cys	Val	Gln 745	Arg	Ala	Glu	Gly	Tyr 750	Phe	Arg

Lys Trp Lys Glu Ser Asn Gly Asn Leu Ser Leu Pro Val Asp Val Thr
755 760 765

Leu Ala Val Phe Ala Val Gly Ala Gln Ser Thr Glu Gly Trp Asp Phe 770 780

Leu Tyr Ser Lys Tyr Gln Phe Ser Leu Ser Ser Thr Glu Lys Ser Gln 785 790 795 800

Ile Glu Phe Ala Leu Cys Xaa Pro Xaa Asn Lys Glu Lys Leu Xaa Trp 805 810 815

Leu Leu Xaa Glu Ser Phe Lys Gly Asp Lys Ile Lys Thr Gln Glu Phe 820 825 830

Pro Gln Ile Leu Thr Leu Ile Gly Arg Asn Pro Val Gly Tyr Pro Leu 835 840 845

Ala Trp Gln Phe Leu Arg Lys Asn Trp Asn Lys Leu Val Gln Lys Phe 850 855 860

Glu Leu Gly Ser Ser Ser Ile Ala His Met Val Met Gly Thr Thr Asn 865 870 875 888

Gln Phe Ser Thr Arg Thr Arg Leu Glu Glu Val Lys Gly Phe Phe Ser 885 890 895

Ser Leu Lys Glu Asn Gly Ser Gln Leu Arg Cys Val Gln Gln Thr Ile 900 905 910

Glu Thr Ile Glu Glu Asn Ile Gly Trp Met Asp Lys Asn Phe Asp Lys 915 920 925

Ile Arg Val Trp Leu Gln Ser Glu Lys Leu Glu Arg Met 930 935 940

<210> 1058

<211> 157

<212> PRT

<213> Homo sapiens

<400> 1058

Met Val Lys Ser Val Ile Phe Leu Ser Phe Trp Gln Gly Met Leu Leu 1 5 10 15

Ala Ile Leu Glu Lys Cys Gly Ala Ile Pro Lys Ile His Ser Ala Arg
20 25 30

Val Ser Val Gly Glu Gly Thr Val Ala Ala Gly Tyr His Asp Phe Ile 35 40 45

Ile Cys Val Glu Met Phe Phe Ala Ala Leu Ala Leu Arg His Pro Phe 50 55 60

Thr Tyr Asn Val Tyr Ala Asp Lys Arg Leu Asp Ala Gln Gly Arg Cys 65 70 75 80

Ala Pro Met Lys Ser Ile Ser Ser Ser Leu Lys Glu Thr Met Asn Pro

85 90 95

His Asp Ile Val Gln Asp Ala Ile His Asn Phe Ser Pro Ala Tyr Gln
100 105 110

Gln Tyr Thr Gln Gln Ser Thr Leu Glu Pro Gly Pro Thr Trp Arg Gly
115 120 125

Gly Ala His Gly Leu Ser Arg Ser His Ser Leu Ser Gly Ala Arg Asp 130 135 140

Asn Glu Lys Thr Leu Leu Leu Ser Ser Asp Asp Glu Phe 145 150 155

<210> 1059

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1059

Phe Leu Ser Ser Trp Gln Arg Pro Ala Cys Gly Cys Gln Arg Pro Ala 1 5 10 15

Leu Pro Leu His Leu Gly Gly Ala Glu Gln Leu Gly Pro Ser Cys Pro 20 25 30

Gly Gly Trp Val Gln Thr Gln Ala Glu Asp Gln Pro Trp Pro Cys Pro
35 40 45

Ala Ile Cys Phe His Gln Ala Val Ser Pro Pro Trp Leu Pro Phe Ser 50 55 60

Leu Gln Ala Lys Val Leu Leu Ile Pro Thr Pro Leu Val Phe Ala Cys
65 70 75 80

Pro Ala Leu Leu Phe Ala Trp Arg Val Gly Gly Ala Gln Trp Gln Gly 85 90 95

Ile Ser Gly Pro Trp Gly Arg Gly Asp Gly Asn Met Cys Pro Thr Ala 100 105 110

Pro Ser Pro Pro Pro Pro 115

<210> 1060

<211> 264

<212> PRT

<213> Homo sapiens

<400> 1060

Met Pro Phe Arg Leu Leu Ile Pro Leu Gly Leu Leu Cys Ala Leu Leu 1 5 10 15

Pro Gln His His Gly Ala Pro Gly Pro Asp Gly Ser Ala Pro Asp Pro 20 25 30

Ala His Tyr Arg Glu Arg Val Lys Ala Met Phe Tyr His Ala Tyr Asp

35 40 45

Ser Tyr Leu Glu Asn Ala Phe Pro Phe Asp Glu Leu Arg Pro Leu Thr 50 55 60

Cys Asp Gly His Asp Thr Trp Gly Ser Phe Ser Leu Thr Leu Ile Asp 65 70 75 80

Ala Leu Asp Thr Leu Leu Ile Leu Gly Asn Val Ser Glu Phe Gln Arg 85 90 95

Val Val Glu Val Leu Gln Asp Ser Val Asp Phe Asp Ile Asp Val Asn 100 105 110

Ala Ser Val Phe Glu Thr Asn Ile Arg Val Val Gly Gly Leu Leu Ser 115 120 125

Ala His Leu Leu Ser Lys Lys Ala Gly Val Glu Val Glu Ala Gly Trp 130 135 140

Pro Cys Ser Gly Pro Leu Leu Arg Met Ala Glu Glu Ala Ala Arg Lys 145 150 155 160

Leu Leu Pro Ala Phe Gln Thr Pro Thr Gly Met Pro Tyr Gly Thr Val 165 170 175

Asn Leu Leu His Gly Val Asn Pro Gly Glu Thr Pro Val Thr Cys Thr 180 185 190

Ala Gly Ile Gly Thr Phe Ile Val Glu Phe Ala Thr Leu Ser Ser Leu
195 200 205

Thr Gly Asp Pro Val Phe Glu Asp Val Ala Arg Val Ala Leu Met Arg 210 215 220

Leu Trp Glu Ser Arg Ser Asp Ile Gly Leu Val Gly Asn His Ile Asp 225 230 235 240

Val Leu Thr Gly Lys Gly Trp Pro Arg Thr Gln Ala Ser Gly Leu Ala 245 250 255

Trp Thr Pro Thr Leu Ser Thr Trp 260

<210> 1061

<211> 316

<212> PRT

<213> Homo sapiens

<400> 1061

Met Leu Arg Arg Gly Ser Pro Gly Met Gly Val His Val Gly Ala 1 5 10 15

Ala Leu Gly Ala Leu Trp Phe Cys Leu Thr Gly Ala Leu Glu Val Gln 20 25 30

Val Pro Glu Asp Pro Val Val Ala Leu Val Gly Thr Asp Ala Thr Leu 35 40 45

Cys Cys Ser Phe Ser Pro Glu Pro Gly Phe Ser Leu Ala Gln Leu Asn Leu Ile Trp Gln Leu Thr Asp Thr Lys Gln Leu Val His Ser Phe Ala Glu Gly Gln Asp Gln Gly Ser Ala Tyr Ala Asn Arg Thr Ala Leu Phe Pro Asp Leu Leu Ala Gln Gly Asn Ala Ser Leu Arg Leu Gln Arg Val Arg Val Ala Asp Glu Gly Ser Phe Thr Cys Phe Val Ser Ile Arg Asp 120 Phe Gly Ser Ala Ala Val Ser Leu Gln Val Ala Ala Pro Tyr Ser Lys 135 Pro Ser Met Thr Leu Glu Pro Asn Lys Asp Leu Arg Pro Gly Asp Thr Val Thr Ile Thr Cys Ser Ser Tyr Gln Gly Tyr Pro Glu Ala Glu Val Phe Trp Gln Asp Gly Gln Gly Val Pro Leu Thr Gly Asn Val Thr Thr 185 Ser Gln Met Ala Asn Glu Gln Gly Leu Phe Asp Val His Ser Ile Leu 200 Arg Val Val Leu Gly Ala Asn Gly Thr Tyr Ser Cys Leu Val Arg Asn Pro Val Leu Gln Gln Asp Ala His Ser Ser Val Thr Ile Thr Gly Gln Pro Met Thr Phe Pro Pro Glu Ala Leu Trp Val Thr Val Gly Leu Ser 245 250 Val Cys Leu Ile Ala Leu Leu Val Ala Leu Ala Phe Val Cys Trp Arg Lys Ile Lys Gln Ser Cys Glu Glu Glu Asn Ala Gly Ala Glu Asp Gln Asp Gly Glu Gly Glu Gly Ser Lys Thr Ala Leu Gln Pro Leu Lys His Ser Asp Ser Lys Glu Asp Asp Gly Gln Glu Ile Ala 310

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<210> 1062
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<211> 302

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (128)

<223> Xaa equals any amino acid

<400> 1062

Met Arg Leu Gly Ser Pro Gly Leu Leu Phe Leu Leu Phe Ser Ser Leu 1 5 10 15

Arg Ala Asp Thr Glu Lys Glu Val Arg Ala Met Val Gly Ser Asp 20 25 30

Val Glu Leu Ser Cys Ala Cys Pro Glu Gly Ser Arg Phe Asp Leu Asn 35 40 45

Asp Val Tyr Val Tyr Trp Gln Thr Ser Glu Ser Lys Thr Val Val Thr 50 60

Tyr His Ile Pro Gln Asn Ser Ser Leu Glu Asn Val Asp Ser Arg Tyr 65 70 75 80

Arg Asn Arg Ala Leu Met Ser Pro Ala Gly Met Leu Arg Gly Asp Phe 85 90 95

Ser Leu Arg Leu Phe Asn Val Thr Pro Gln Asp Glu Gln Lys Phe His 100 105 110

Cys Leu Val Leu Ser Gln Ser Leu Gly Phe Gln Glu Val Leu Ser Xaa 115 120 125

Glu Val Thr Leu His Val Ala Ala Asn Phe Ser Val Pro Val Val Ser 130 135 140

Ala Pro His Ser Pro Ser Gln Asp Glu Leu Thr Phe Thr Cys Thr Ser 145 150 155 160

Ile Asn Gly Tyr Pro Arg Pro Asn Val Tyr Trp Ile Asn Lys Thr Asp 165 170 175

Asn Ser Leu Leu Asp Gln Ala Leu Gln Asn Asp Thr Val Phe Leu Asn 180 185 190

Met Arg Gly Leu Tyr Asp Val Val Ser Val Leu Arg Ile Ala Arg Thr 195 200 205

Pro Ser Val Asn Ile Gly Cys Cys Ile Glu Asn Val Leu Leu Gln Gln 210 215 220

Asn Leu Thr Val Gly Ser Gln Thr Gly Asn Asp Ile Gly Glu Arg Asp 225 230 235 240

Lys Ile Thr Glu Asn Pro Val Ser Thr Gly Glu Lys Asn Ala Ala Thr  $245 \hspace{1.5cm} 250 \hspace{1.5cm} 255$ 

Trp Ser Ile Leu Ala Val Leu Cys Leu Leu Val Val Val Ala Val Ala 260 265 270

Ile Gly Trp Val Cys Arg Asp Arg Cys Leu Gln His Ser Tyr Ala Gly 275 280 285

Ala Trp Ala Val Ser Pro Glu Thr Glu Leu Thr Gly His Val 290 295 300

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<210> 1063
<211> 59
<212> PRT
<213> Homo sapiens
<400> 1063
Met Met Lys Asp Val Phe Phe Phe Leu Phe Leu Leu Ala Val Trp Val
                                      10
Val Ser Phe Gly Val Ala Lys Gln Ala Ile Leu Ile His Asn Glu Arg
Arg Val Asp Trp Leu Phe Arg Gly Pro Ser Thr Thr Pro Thr Ser Pro
Ser Ser Gly Arg Ser Arg Ala Thr Ser Thr Val
                        55
<210> 1064
<211> 109
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (94)
<223> Xaa equals any amino acid
<400> 1064
Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Ile Cys Leu Gly
                                     10
Ile Ile Leu Ala Ile Gly Asn Ser Ile Trp Glu Ser Gln Thr Gly Asp
Gln Phe Arg Thr Phe Leu Phe Trp Asn Glu Gly Glu Lys Ser Ser Val
                             40
Phe Ser Gly Phe Leu Thr Phe Trp Ser Tyr Ile Ile Ile Leu Asn Thr
                         55
Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu Gly
His Ser Tyr Phe Ile Asn Trp Asp Arg Lys Met Tyr Tyr Xaa Arg Lys
Ala Ile Pro Ala Val Ala Arg Thr Thr Thr Leu Asn Glu
            100
<210> 1065
<211> 46
<212> PRT
<213> Homo sapiens
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<220>

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<221> SITE
<222> (45)
<223> Xaa equals any amino acid
<400> 1065
Ile Asn His Val Phe Ile Trp Gly Ser Ile Ala Ile Tyr Phe Ser Ile
                                                         15
 1
                                     10
Leu Phe Thr Met His Ser Asn Gly Ile Phe Gly Ile Phe Pro Asn Gln
Phe Pro Phe Val Gly Asn Ala Arg His Ser Leu Thr Xaa Lys
                             40
<210> 1066
<211> 6
<212> PRT
<213> Homo sapiens
<400> 1066
Thr Val Ala Ile Tyr Asp
 1
<210> 1067
<211> 11
<212> PRT
<213> Homo sapiens
<400> 1067
Phe Leu Val Cys Leu Leu Gly Pro Arg Ser
1
                5
<210> 1068
<211> 56
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (35)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (42)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (46)
<223> Xaa equals any amino acid
<400> 1068
Lys Ser Gln Met Gln Ser Phe Thr Ile Val Thr Ala Tyr Gly Arg Cys
                 5
1
                                                         15
```

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Leu Ser Leu Thr Cys Leu Pro Thr Leu Asn Gln Met Leu Val Phe Lys
Ser Asn Xaa Ser Leu Val Ser Pro His Xaa Leu Thr Phe Xaa Asn Ile
                             40
Phe Ala Arg Phe Glu Asn Phe Gln
     50
<210> 1069
<211> 53
<212> PRT
<213> Homo sapiens
<400> 1069
Asn Tyr Asn Arg Gly Gly Thr Phe Leu Tyr Gln Lys Ala Lys Ile Lys
His His Val Leu Met Val Phe Tyr Lys Ser Thr Ser Asn Ser Thr Glu
Ser Leu Ile Trp Ser Leu Leu Asn Ser Trp Ser Asp Lys Val Thr Phe
Pro Lys Arg Val Arg
   50
<210> 1070
<211> 46
<212> PRT
<213> Homo sapiens
<400> 1070
Met Pro Trp Leu Lys Ser Leu Leu His Phe Ser Leu Phe Leu Val Val
Phe Ser Thr Leu Ala Val Lys Ser Leu Gly Val Pro Val Ala Ala Gly
                                 25
Ser Pro Phe Cys Ile Val Asp Val Leu His Phe Ile Leu Leu
                            40
<210> 1071
<211> 64
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (7)
<223> Xaa equals any amino acid
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<220> <221> SITE

<222> (27)

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<223> Xaa equals any amino acid
<400> 1071
Ser Trp Val Ile Val Val Xaa Ile Trp Gly Tyr Leu Leu Glu Gly His
Gly Val Pro Phe Cys Lys Ser Tyr Gly Pro Xaa Pro Trp Lys Leu His
             20
                                 25
Thr His His Ala Ala Tyr Asn Ser Gly Ser Ser Gln Val Tyr Arg Ile
Leu Gly Asn Ser Pro Cys Pro Val Leu Ile His Cys Ser Phe Ser Gly
<210> 1072
<211> 14
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (9)
<223> Xaa equals any amino acid
<22,0>
<221> SITE
<222> (14)
<223> Xaa equals any amino acid
<400> 1072
Trp Lys Gly Leu Leu Glu Gly Ser Xaa Glu Ala Thr Met Xaa
 1
<210> 1073
<211> 107
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (66)
<223> Xaa equals any amino acid
<400> 1073
Pro Leu Gly Arg Glu Pro Leu Ala Gly Phe Leu Ser Phe Leu Ser Phe
Ser Leu Leu Trp Cys Leu Glu Ala Phe Pro Arg Leu Gln Phe Leu Thr
                                 25
```

45

Thr Leu Thr Asp Phe Ala Ile Val Leu Ser Pro Pro Leu Ser Phe Pro 40

Lys Leu Thr Leu Trp Arg Leu Ile Lys Arg Lys Asn His Arg Pro Gly 50 55 60

Ala Xaa Leu Thr Pro Arg Arg Arg Ala Asn His Leu Arg Cys Gly Val
65 70 75 80

Arg Asp Gln Pro Asp Gln Asn Arg Glu Thr Pro Ser Leu Leu Asn Asn 85 90 95

Thr Lys Leu Ala Gly Arg Gly Gly Ala Arg Leu 100 105

<210> 1074

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1074

Met Pro Arg Ala Pro Trp Arg Ile Pro Leu Cys Ala Leu Pro Thr Leu

1 5 10 15

Cys Leu Gly Ser Pro Leu Pro Ser Gln Pro Thr His Pro Ile Phe Tyr 20 25 30

Asp His Arg Ala Pro Thr Trp Lys Met Ala His Pro Gly Gly Pro Arg 35 40 45

Ser Ser His Ser Pro Arg Gly Pro Gly Gly His Pro Ala Leu Arg Gln 50 55 60

Arg Leu Pro Cys Arg Arg Gly Glu Pro Glu Thr Ala Leu Cys Ser Ser 65 70 75 80

Ala Pro Gly Ala Gly Phe Ala Glu Pro Pro Cys Lys Ala Ser Pro Gly 85 90 95

Trp Gly Pro Pro Ser Arg Gly Pro Gln Gly Asp Arg Ser Gln Gly Glu
100 105 110

Trp Leu Pro Ala Leu Gly Thr Pro Cys Gly Gly Pro Asp Asp Ser 115 120 125

<210> 1075

<211> 90

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (31)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (57)

<223> Xaa equals any amino acid

<400> 1075

Met Pro Arg Ala Pro Trp Arg Ile Pro Leu Cys Ala Leu Pro Thr Leu 1 5 10 15

Cys Leu Gly Ser Pro Leu Pro Ser Gln Pro Thr His Pro Ile Xaa Tyr \$20\$

Asp His Arg Ala Pro Thr Trp Lys Met Ala His Pro Gly Gly Pro Arg  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ser Ser His Ser Pro Arg Thr Trp Xaa Thr Pro Ser Ser Gln Thr Lys 50 60

Ala Ala Leu Pro Ala Gly Gly Ala Arg Asn Ser Pro Leu Gln Leu Cys 65 70 75 80

Thr Arg Ser Arg Phe Cys Gly Thr Pro Met

<210> 1076

<211> 308

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (87)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (185)

<223> Xaa equals any amino acid

<400> 1076

Met Pro Val Pro Trp Phe Leu Leu Ser Leu Ala Leu Gly Arg Ser Pro 1 5 10 15

Val Val Leu Ser Leu Glu Arg Leu Val Gly Pro Gln Asp Ala Thr His \$20\$ \$25\$ \$30

Cys Ser Pro Gly Leu Ser Cys Arg Leu Trp Asp Ser Asp Ile Leu Cys 35 40 45

Leu Pro Gly Asp Ile Val Pro Ala Pro Gly Pro Val Leu Ala Pro Thr 50 55 60

His Leu Gln Thr Glu Leu Val Leu Arg Cys Gln Lys Glu Thr Asp Cys
65 70 75 80

Asp Leu Cys Leu Arg Val Xaa Val His Leu Ala Val His Gly His Trp 85 90 95

Glu Glu Pro Glu Asp Glu Glu Lys Phe Gly Gly Ala Ala Asp Leu Gly
100 105 110

Val Glu Glu Pro Arg Asn Ala Ser Leu Gln Ala Gln Val Val Leu Ser 115 120 125

Phe Gln Ala Tyr Pro Thr Ala Arg Cys Val Leu Leu Glu Val Gln Val 130 135 140

Asp Cys Phe Glu Ala Ala Leu Gly Ser Glu Val Arg Ile Trp Ser Tyr 165 170 175

Thr Gln Pro Arg Tyr Glu Lys Glu Xaa Asn His Thr Gln Gln Leu Pro 180 185 190

Asp Cys Arg Gly Leu Glu Val Trp Asn Ser Ile Pro Ser Cys Trp Ala 195 200 205

Leu Pro Trp Leu Asn Val Ser Ala Asp Gly Asp Asn Val His Leu Val 210 215 220

Leu Asn Val Ser Glu Glu Gln His Phe Gly Leu Ser Leu Tyr Trp Asn 225 230 235 240

Gln Val Gln Gly Pro Pro Lys Pro Arg Trp His Lys Asn Leu Thr Gly 245 250 255

Pro Gln Ile Ile Thr Leu Asn His Thr Asp Leu Val Pro Cys Leu Cys 260 265 270

Ile Gln Val Trp Pro Leu Glu Pro Asp Ser Val Arg Arg Thr Ser Ala 275 280 285

Pro Ser Gly Arg Thr Pro Ala His Thr Arg Thr Ser Gly Lys Pro Pro 290 295 300

Asp Cys Asp Cys 305

<210> 1077

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1077

Met Ser Ser Asp Phe Leu Cys Phe Phe Phe Lys Leu Cys Asn Gln Met
1 5 10 15

Ile Leu Cys Phe Phe Phe Arg Gly Ala Glu Tyr Trp Phe Leu Leu Leu 20 25 30

Val Val Phe Ser Phe Leu Cys His Ser Cys Phe Phe Phe Val Phe Ser 35 40 45

Val Ser Asn Thr Ile Cys Ile 50 55

<210> 1078 <211> 99

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<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (91)
<223> Xaa equals any amino acid
<400> 1078
Met Ala Ala Leu Leu Leu Pro Leu Leu Leu Leu Leu Pro Leu Leu
                                     10
Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Asp
Leu Ala Phe Ala Val Arg Ala Leu Cys Cys Lys Arg Ala Leu Arg Ala
Arg Ala Leu Ala Ala Ala Ala Asp Pro Glu Gly Pro Glu Gly Gly
Cys Ser Leu Ala Trp Arg Leu Ala Glu Leu Ala Gln Gln Arg Ala Glu
Leu Leu Arg Ser Arg Ala Leu Ala Thr Xaa Arg Arg Ser Ala Arg
Val Thr Gly
<210> 1079
<211> 214
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (199)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (206)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (214)
<223> Xaa equals any amino acid
<400> 1079
Met Leu Gly Ala Arg Ala Trp Leu Gly Arg Val Leu Leu Pro Arg
Ala Gly Ala Gly Leu Ala Ala Ser Arg Arg Cys Pro Gly Val Trp Pro
Arg Thr Trp Pro His Arg Ser Pro Ser Arg Gly Ser Ser Ser Arg Asp
```

40

35

Lys Asp Arg Ser Ala Thr Val Ser Ser Ser Val Pro Met Pro Ala Gly 50 55 60

Gly Lys Gly Ser His Pro Ser Ser Thr Pro Gln Arg Val Pro Asn Arg 65 70 75 80

Leu Ile His Glu Lys Ser Pro Tyr Leu Leu Gln His Ala Tyr Asn Pro 85 90 95

Val Asp Trp Tyr Pro Trp Gly Gln Glu Ala Phe Asp Lys Ala Arg Lys 100 105 110

Glu Asn Lys Pro Ile Phe Leu Ser Val Gly Tyr Ser Thr Cys His Trp 115 120 125

Cys His Met Met Glu Glu Glu Ser Phe Gln Asn Glu Glu Ile Gly Arg 130 135 140

Leu Leu Ser Glu Asp Phe Val Ser Val Lys Val Asp Arg Glu Glu Arg 145 150 155 160

Pro Asp Val Asp Lys Val Tyr Met Thr Phe Val Gln Ala Thr Ser Ser 165 170 175

Gly Gly Gly Trp Pro Met Asn Val Trp Leu Thr Pro Asn Leu Gln Pro  $180 \,$   $185 \,$   $190 \,$ 

Phe Val Gly Gly Thr Ile Xaa Leu Leu Lys Asp Gly Leu Xaa Arg Val 195 200 205

Gly Ser Ala Gln Cys Xaa 210

<210> 1080

<211> 43

<212> PRT

<213> Homo sapiens

<400> 1080

Met Leu Gly Ala Arg Ala Trp Leu Gly Arg Val Leu Leu Leu Pro Arg 1 5 10

Ala Gly Ala Gly Leu Ala Ala Ser Arg Arg Ser Ala Cys Ser Pro Thr 20 25 30

Ser Arg Leu Asn Ser Leu Arg Ser Leu Ile Pro 35 40

<210> 1081

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1081

Met His Cys Cys Gln Leu Pro Trp Arg Cys Ala Gln Ala Pro Gln Glu
1 5 10 15

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Ala Phe Leu Cys Leu Leu Phe Leu Ile Leu Val Leu Val Leu Leu
Gly Cys Ser Arg Gly Leu Pro Gly His Thr Pro Trp Arg Leu His Pro
Ala Ala Ala Leu Leu Ala Pro Leu Leu His Asp Ala Leu Gly Ala
Cys Gly Phe Gln Gly Pro Glu Tyr Leu Leu Pro Cys Leu Leu Pro Leu
Pro Lys Pro Gly Gln Leu Gln Gly Pro Trp Gly Pro Leu Trp Ala Leu
                                    90
Leu Pro
<210> 1082
<211> 22
<212> PRT
<213> Homo sapiens
<400> 1082
Leu Pro Arg Pro Cys Ala Pro Ser Pro Val Trp Arg Gln Val Gly Arg
Glu Glu Ala Ser Leu Leu
. 20
<210> 1083
<211> 25
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (9)
<223> Xaa equals any amino acid
Cys Ala Val Arg Phe Arg Glu Gln Xaa Ala Pro Glu Arg Val Phe Leu
Pro Thr Arg Gly Arg Lys Ser Glu Pro
            20
<210> 1084
<211> 333
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
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<222> (100)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (111)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (227)

<223> Xaa equals any amino acid

<400> 1084

Met Leu Thr Gly Ile Ala Val Gly Ala Leu Leu Ala Leu Ala Leu Val 1 5 10

Gly Val Leu Ile Leu Phe Met Phe Arg Arg Leu Arg Gln Phe Arg Gln 20 25 30

Ala Gln Pro Thr Pro Gln Tyr Arg Phe Arg Lys Arg Asp Lys Val Met
35 40 45

Phe Tyr Gly Arg Lys Ile Met Arg Lys Val Thr Thr Leu Pro Asn Thr 50 55 60

Leu Val Glu Asn Thr Ala Leu Pro Arg Gln Arg Ala Arg Lys Arg Thr 65 70 75 80

Lys Val Leu Ser Leu Ala Lys Arg Ile Leu Arg Phe Lys Lys Glu Tyr 85 90 95

Pro Gly Leu Xaa Pro Lys Asp Pro Arg Pro Ser Leu Leu Glu Xaa Asp 100 105 110

Phe Thr Glu Phe Asp Val Lys Asn Ser His Leu Pro Ser Glu Val Leu
115 120 125

Tyr Met Leu Lys Asn Val Arg Val Leu Gly His Phe Glu Lys Pro Leu 130 135 140

Phe Leu Glu Leu Cys Lys His Ile Val Phe Val Gln Leu Gln Glu Gly 145 150 155 160

Glu His Val Phe Gln Pro Arg Glu Pro Asp Pro Ser Ile Cys Val Val 165 170 175

Gln Asp Gly Arg Leu Glu Val Cys Ile Gln Asp Thr Asp Gly Thr Glu 180 185 190

Val Val Lys Glu Val Leu Ala Gly Asp Ser Val His Ser Leu Leu 195 200 205

Ser Ile Leu Asp Ile Ile Thr Gly His Ala Ala Pro Tyr Lys Thr Val 210 215 220

Ser Val Xaa Ala Ala Ile Pro Ser Thr Ile Leu Arg Leu Pro Ala Ala 225 230 235 240

Ala Phe His Gly Val Phe Glu Lys Tyr Pro Glu Thr Leu Val Arg Val 245 250 255

Val Gln Ile Ile Met Val Arg Leu Gln Arg Val Thr Phe Leu Ala Leu 260 265 270

His Asn Tyr Leu Gly Leu Thr Thr Glu Leu Phe Asn Ala Glu Ser Gln 275 280 285

- Ala Ile Pro Leu Val Ser Val Ala Ser Val Ala Ala Gly Lys Ala Lys 290 295 300

Lys Gln Val Phe Tyr Gly Glu Glu Glu Arg Leu Lys Lys Pro Pro Arg 305 310 315 320

Leu Gln Glu Ser Cys Asp Ser Asp His Gly Gly Arg 325 330

<210> 1085

<211> 365

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (144)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (201)

<223> Xaa equals any amino acid

<400> 1085

Met Phe Val Gly Leu Met Ala Phe Leu Leu Ser Phe Tyr Leu Ile Phe  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Thr Asn Glu Gly Arg Ala Leu Lys Thr Ala Thr Ser Leu Ala Glu Gly 20 25 30

Leu Ser Leu Val Val Ser Pro Asp Ser Ile His Ser Val Ala Pro Glu 35 40 45

Asn Glu Gly Arg Leu Val His Ile Ile Gly Ala Leu Arg Thr Ser Lys 50 55 60

Leu Leu Ser Asp Pro Asn Tyr Gly Val His Leu Pro Ala Val Lys Leu 65 70 75 80

Arg Arg His Val Glu Met Tyr Gln Trp Val Glu Thr Glu Glu Ser Arg 85 90 95

Glu Tyr Thr Glu Asp Gly Gln Val Lys Lys Glu Thr Arg Tyr Ser Tyr
100 105 110

Asn Thr Glu Trp Arg Ser Glu Ile Ile Asn Ser Lys Asn Phe Asp Arg 115 120 125

Glu Ile Gly His Lys Asn Pro Ser Ala Met Ala Val Glu Ser Phe Xaa 130 135 140

Ala Thr Ala Pro Phe Val Gln Ile Gly Arg Phe Phe Leu Ser Ser Gly

150 155 Leu Ile Asp Lys Val Asp Asn Phe Lys Ser Leu Ser Leu Ser Lys Leu Glu Asp Pro His Val Asp Ile Ile Arg Arg Gly Asp Phe Phe Tyr His 185 Ser Glu Asn Pro Lys Tyr Pro Glu Xaa Gly Asp Leu Arg Val Ser Phe 200 Ser Tyr Ala Gly Leu Ser Gly Asp Asp Pro Asp Leu Gly Pro Ala His Val Val Thr Val Ile Ala Arg Gln Arg Gly Asp Gln Leu Val Pro Phe 230 Ser Thr Lys Ser Gly Asp Thr Leu Leu Leu Leu His His Gly Asp Phe 250 Ser Ala Glu Glu Val Phe His Arg Glu Leu Arg Ser Asn Ser Met Lys 265 Thr Trp Gly Leu Arg Ala Ala Gly Trp Met Ala Met Phe Met Gly Leu Asn Leu Met Thr Arg Ile Leu Tyr Thr Leu Val Asp Trp Phe Pro Val Phe Arg Asp Leu Val Asn Ile Gly Leu Lys Ala Phe Ala Phe Cys Val 315 Ala Thr Ser Leu Thr Leu Leu Thr Val Ala Ala Gly Trp Leu Phe Tyr 325 330 Arg Pro Leu Trp Ala Leu Leu Ile Ala Gly Leu Ala Leu Val Pro Ile Leu Val Ala Arg Thr Arg Val Pro Ala Lys Lys Leu Glu 360 <210> 1086 <211> 220 <212> PRT <213> Homo sapiens <220> <221> SITE

<400> 1086

<222> (159)

<223> Xaa equals any amino acid

Met Lys Leu Leu Trp Ala Cys Ile Val Cys Val Ala Phe Ala Arg
1 5 10 15

Lys Arg Arg Phe Pro Phe Ile Gly Glu Asp Asp Asn Asp Asp Gly His 20 25 30

Pro Leu His Pro Ser Leu Asn Ile Pro Tyr Gly Ile Arg Asn Leu Pro 35 40 45

- Pro Pro Leu Tyr Tyr Arg Pro Val Asn Thr Val Pro Ser Tyr Pro Gly 50 55 60
- Asn Thr Tyr Thr Asp Thr Gly Leu Pro Ser Tyr Pro Trp Ile Leu Thr 65 70 75 80
- Ser Pro Gly Phe Pro Tyr Val Tyr His Ile Arg Gly Phe Pro Leu Ala 85 90 95
- Thr Gln Leu Asn Val Pro Pro Leu Pro Pro Arg Gly Phe Pro Phe Val 100 105 110
- Pro Pro Ser Arg Phe Phe Ser Ala Ala Ala Pro Ala Ala Pro Pro 115 120 125
- Ile Ala Ala Glu Pro Ala Ala Ala Pro Leu Thr Ala Thr Pro Val $130 \\ 135 \\ 140 \\$
- Ala Ala Glu Pro Ala Ala Arg Gly Pro Val Ala Ala Glu Pro Xaa Gly 145 150 155 160
- Arg Gly His Leu Leu Glu Leu Glu Pro Ala Ala Glu Ala Pro Val Ala 165 170 175
- Ala Glu Pro Ala Ala Glu Ala Pro Val Gly Val Glu Pro Ala Ala Glu 180 185 190
- Glu Pro Ser Pro Ala Glu Pro Ala Thr Ala Lys Pro Ala Ala Pro Glu 195 200 205
- Pro His Pro Ser Pro Ser Leu Glu Gln Ala Asn Gln 210 215 220
- <210> 1087
- <211> 108
- <212> PRT
- <213> Homo sapiens
- <220>
- <221> SITE
- <222> (48)
- <223> Xaa equals any amino acid
- <220>
- <221> SITE
- <222> (55)
- <223> Xaa equals any amino acid
- <220>
- <221> SITE
- <222> (58)
- <223> Xaa equals any amino acid
- <220>
- <221> SITE
- <222> (67)

35 40 45

Leu Gln Thr Trp Gly Xaa Pro Asp Xaa Gln Phe Pro Gly Cys Pro 50 55 60

His Pro Xaa Arg Val Thr Leu Asn Ala Arg Gln Met Gly Asn Gly Lys
65 70 75 80

Glu Lys Lys Ala Ala Asp Leu Lys Leu Lys Phe Pro Gln Lys Arg Phe 85 90 95

Tyr Leu Ser Ala Phe Ser Glu Arg Ile Lys Ala Phe 100 105

<210> 1088 <211> 73 <212> PRT <213> Homo sapiens · <220> <221> SITE <222> (38) <223> Xaa equals any amino acid <220> <221> SITE <222> (48) <223> Xaa equals any amino acid <220> <221> SITE <222> (54) <223> Xaa equals any amino acid <220> <221> SITE <222> (55) <223> Xaa equals any amino acid <220> <221> SITE <222> (68) <223> Xaa equals any amino acid <400> 1088

Met Phe Tyr Lys Leu Thr Leu Ile Leu Cys Glu Leu Ser Val Ala Gly
1 5 10 15

Val Thr Gln Ala Ala Ser Gln Arg Pro Leu Gln Arg Leu Pro Arg His

20 25 30

Ile Cys Ser Gln Arg Xaa Pro Pro Gly Arg Cys Leu Leu Lys Ala Xaa 35 40 45

Leu Gln Thr Trp Xaa Xaa Pro Asp Lys Pro Ile Pro Arg Leu Ser 50 60

Pro Pro Leu Xaa Ser Asp Pro Lys Arg 65 70

<210> 1089

<211> 29

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (26)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (29)

<223> Xaa equals any amino acid

<400> 1089

Met Tyr Val Trp Val Ser Gly Ala Leu Val Leu Val Leu Ser Pro His 1 5 10 15

Pro Ala Ser Arg Thr Leu Cys Leu Met Xaa Gln Ala Xaa 20 25

<210> 1090

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1090

Pro His Cys Ala Ser Arg Ala Val Pro Tyr Pro Pro Gly Pro Ala Ala 1 5 10 15

Ala Ala Phe Pro Arg Gln Gly Leu Gln Leu Ala Thr Thr Cys Gly His  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Ser Ser Asp Pro Ala Cys Phe Gly Gln Cys Pro Cys His Leu Cys Ala 35 40 45

Asn His Pro Gly Tyr Leu Trp Ser Tyr Arg Val His Leu Ser Pro Gln 50 60

Pro His Leu His Pro Pro Gln His Leu Leu Pro Pro His Cys Thr Leu 65 70 75 80

<210> 1091 <211> 81 <212> PRT <213> Homo sapiens

<400> 1091

Met Ser Lys Arg Ser Ala Ser Phe Ile Leu Leu Pro Leu Leu Phe Leu 1 5 10 15

Lys Gly Ser Phe Ala Lys Leu Asn Ala Arg Ile Ser Asp Cys Leu Glu 20 25 30

Glu Arg Tyr Cys His Asn Leu Trp Met Val Phe Gln Gly Cys Val Ile  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Thr Glu Leu His Leu Ser Arg Met Ser Lys Thr Leu Ser Ser Leu Cys
50 60

Tyr Asp Phe Val Ile Asn Val Tyr Ile Phe Phe Lys Phe Leu Asp Ile 65 70 75 80

Thr

<210> 1092 <211> 159 <212> PRT <213> Homo sapiens

<400> 1092

Leu Leu Gly Ser Met Ala Gly Tyr Gly Pro Gln Lys Lys Leu Asn Leu 20 25 30

Ser His Lys Gly Ile Gly Glu Pro Cys Gly Arg His Glu Glu Cys Gln 35 40 45

Ser Asn Cys Cys Thr Ile Asn Ser Leu Ala Pro His Thr Leu Cys Thr 50 55 60

Pro Lys Thr Ile Phe Leu Gln Cys Leu Pro Trp Arg Lys Pro Asn Gly 65 70 75 80

Tyr Arg Cys Ser His Asp Ser Glu Cys Gln Ser Ser Cys Cys Val Arg 85 90 95

Asn Asn Ser Pro Gln Glu Leu Cys Thr Pro Gln Ser Val Phe Leu Gln 100 105 110

Cys Val Pro Trp Arg Lys Pro Asn Gly Asp Phe Cys Ser Ser His Gln 115 120 125

Glu Cys His Ser Gln Cys Cys Ile Gln Leu Arg Glu Tyr Ser Pro Phe 130 135 140

Arg Cys Ile Pro Arg Thr Gly Ile Leu Ala Gln Cys Leu Pro Leu 145 150 155

<210> 1093

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1093

Met Met Leu Pro Gln Trp Leu Leu Leu Leu Phe Leu Leu Phe Phe Phe 1 5 10 15

Leu Phe Leu Leu Thr Arg Gly Ser Leu Ser Pro Thr Lys Tyr Asn Leu 20 25 30

Leu Glu Leu Lys Glu Ser Cys Ile Arg Asn Gln Asp Cys Glu Thr Gly 35 40 45

Cys Cys Gl<br/>n Arg Ala Pro Asp Asn Cys Glu Ser His Cys Ala Glu Lys 50  $\,$  <br/>  $\,$  60

Gly Ser Glu Gly Ser Leu Cys Gln Thr Gln Val Phe Phe Gly Gln Tyr
65 70 75 80

Arg Ala Cys Pro Cys Leu Arg Asn Leu Thr Cys Ile Tyr Ser Lys Asn \$90\$ 95

Glu Lys Trp Leu Ser Ile Ala Tyr Gly Arg Cys Gln Lys Ile Gly Arg 100 105 110

Gln Lys Leu Ala Lys Lys Met Phe Phe 115 120

<210> 1094

<211> 122

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (89)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (91)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (94)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (97)

<223> Xaa equals any amino acid

PCT/US02/08277

WO 03/038063 <220> <221> SITE <222> (98) <223> Xaa equals any amino acid <400> 1094 Met His Arg Ser Glu Pro Phe Leu Lys Met Ser Leu Leu Ile Leu Leu Phe Leu Gly Leu Ala Glu Ala Cys Thr Pro Arg Glu Val Asn Leu Leu Lys Gly Ile Ile Gly Leu Met Ser Arg Leu Ser Pro Asp Glu Ile Leu 40 Gly Leu Leu Ser Leu Gln Val Leu His Glu Glu Thr Ser Gly Cys Lys Glu Glu Val Lys Pro Phe Ser Gly Thr Thr Pro Ser Arg Lys Pro Leu Pro Lys Arg Glu Glu His Val Glu Xaa Pro Xaa Asn Ala Xaa Thr Trp Xaa Xaa Thr Tyr Leu Phe Val Ser Tyr Asn Lys Gly Asp Trp Phe Thr 105 Phe Ser Ser Gln Val Leu Leu Pro Leu Leu

<210> 1095

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1095

Met Ala Arg Gly Ser Leu Arg Arg Leu Leu Arg Leu Leu Val Leu Gly

Leu Trp Leu Ala Leu Leu Arg Ser Val Ala Gly Glu Gln Ala Pro Gly

Thr Ala Pro Cys Ser Arg Gly Ser Ser Trp Ser Ala Asp Leu Asp Lys 40

Cys Met Asp Cys Ser Thr Ser Cys Pro Leu Pro Ala Ala Leu Ala His

Pro Trp Gly Arg Ser Glu Pro Asp Leu Arg Ala Gly Ala Ala Phe Trp

Leu Phe Gly Leu Glu Thr Met Pro Gln Arg Glu Lys Phe Thr Thr Pro

Ile Glu Glu Thr Gly Gly Glu Gly Cys Pro Ala Val Ala Leu Ile Gln 105

<210> 1096 <211> 155 <212> PRT <213> Homo sapiens <400> 1096 Met Ala Arg Gly Ser Leu Arg Arg Leu Leu Arg Leu Val Leu Gly Leu Trp Leu Ala Leu Leu Arg Ser Val Ala Gly Glu Gln Ala Pro Gly Thr Ala Pro Cys Ser Arg Gly Ser Ser Trp Ser Ala Asp Leu Asp Lys Cys Met Asp Cys Ser Thr Ser Cys Pro Leu Pro Ala Ala Leu Ala His Pro Trp Gly Arg Ser Glu Pro Asp Leu Arg Ala Gly Ala Ala Phe Trp Leu Phe Gly Leu Glu Thr Met Pro Gln Glu Arg Glu Val His His Pro His Arg Gly Asp Arg Arg Gly Leu Pro Ser Cys Gly Ala Asp Pro Val Thr Met Cys Pro Leu Pro Ala Gly Ala Arg Pro Leu Ile Ile His 120 Ser Ser Ile Leu Glu Pro Val Ser Ala Ser Gln Thr Arg Arg Glu Pro 130 Ser Ser Ser Asn His Lys Gly Gly Gly Arg 150

<210> 1097

<211> 47

<212> PRT

<213> Homo sapiens

<400> 1097

Met Ser Leu Leu Leu Pro Pro Leu Ala Leu Leu Leu Leu Leu Ala Ala 1 5 10 15

Leu Val Ala Pro Ala Thr Ala Ala Thr Ala Tyr Arg Pro Asp Trp Asn 20 25 30

 $\mbox{Arg^{\,\cdot}Leu}$  Ser Gly Leu Thr Arg Ala Arg Val Glu Thr Cys Gly Gly 35 \$40\$

<210> 1098 <211> 17

<212> PRT

<213> Homo sapiens

<400> 1098

Met Ser Lys Ala Arg Phe Pro Phe Leu Leu Ser Leu Arg Trp Phe Ser 1 5 10 15

Ala

<210> 1099

<211> 549

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (132)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (398)

<223> Xaa equals any amino acid

<400> 1099

Met Gly Asn Ala Cys Ile Pro Leu Lys Arg Ile Ala Tyr Phe Leu Cys

1 10 15

Leu Leu Ser Ala Leu Leu Thr Glu Gly Lys Lys Pro Ala Lys Pro 20 25 30

Lys Cys Pro Ala Val Cys Thr Cys Thr Lys Asp Asn Ala Leu Cys Glu 35 40 45

Asn Ala Arg Ser Ile Pro Arg Thr Val Pro Pro Asp Val Ile Ser Leu 50 55 60

Ser Phe Val Arg Ser Gly Phe Thr Glu Ile Ser Glu Gly Ser Phe Leu 65 70 75 80

Phe Thr Pro Ser Leu Gln Leu Leu Leu Phe Thr Ser Asn Ser Phe Asp 85 90 95

Val Ile Ser Asp Asp Ala Phe Ile Gly Leu Pro His Leu Glu Tyr Leu 100 105 110

Phe Ile Glu Asn Asn Ile Lys Ser Ile Ser Arg His Thr Phe Arg 115 120 125

Gly Leu Lys Xaa Leu Ile His Leu Ser Leu Ala Asn Asn Asn Leu Gln 130 135 140

Thr Leu Pro Lys Asp Ile Phe Lys Gly Leu Asp Ser Leu Thr Asn Val 145 150 155 160

Asp Leu Arg Gly Asn Ser Phe Asn Cys Asp Cys Lys Leu Lys Trp Leu 165 170 175

Val Glu Trp Leu Gly His Thr Asn Ala Thr Val Glu Asp Ile Tyr Cys 185 Glu Gly Pro Pro Glu Tyr Lys Lys Arg Lys Ile Asn Ser Leu Ser Ser Lys Asp Phe Asp Cys Ile Ile Thr Glu Phe Ala Lys Ser Gln Asp Leu Pro Tyr Gln Ser Leu Ser Ile Asp Thr Phe Ser Tyr Leu Asn Asp Glu 230 235 Tyr Val Val Ile Ala Gln Pro Phe Thr Gly Lys Cys Ile Phe Leu Glu 250 Trp Asp His Val Glu Lys Thr Phe Arg Asn Tyr Asp Asn Ile Thr Gly Thr Ser Thr Val Val Cys Lys Pro Ile Val Ile Glu Thr Gln Leu Tyr 280 Val Ile Val Ala Gln Leu Phe Gly Gly Ser His Ile Tyr Lys Arg Asp Ser Phe Ala Asn Lys Phe Ile Lys Ile Gln Asp Ile Glu Ile Leu Lys 310 315 . Ile Arg Lys Pro Asn Asp Ile Glu Thr Phe Lys Ile Glu Asn Asn Trp Tyr Phe Val Val Ala Asp Ser Ser Lys Ala Gly Phe Thr Thr Ile Tyr Lys Trp Asn Gly Asn Gly Phe Tyr Ser His Gln Ser Leu His Ala Trp 360 Tyr Arg Asp Thr Asp Val Glu Tyr Leu Glu Ile Val Arg Thr Pro Gln 370 375 Thr Leu Arg Thr Pro His Leu Ile Leu Ser Ser Ser Xaa Arg Pro 395 Val Ile Tyr Gln Trp Asn Lys Ala Thr Gln Leu Phe Thr Asn Gln Thr 405 Asp Ile Pro Asn Met Glu Asp Val Tyr Ala Val Lys His Phe Ser Val 425 Lys Gly Asp Val Tyr Ile Cys Leu Thr Arg Phe Ile Gly Asp Ser Lys 440 Val Met Lys Trp Gly Gly Ser Ser Phe Gln Asp Ile Gln Arg Met Pro Ser Arg Gly Ser Met Val Phe Gln Pro Leu Gln Ile Asn Asn Tyr Gln Tyr Ala Ile Leu Gly Ser Asp Tyr Ser Phe Thr Gln Val Tyr Asn Trp

Asp Ala Glu Lys Ala Lys Phe Val Lys Phe Gln Glu Leu Asn Val Gln

500 505 510

Ala Pro Arg Ser Phe Thr His Val Ser Ile Asn Lys Arg Asn Phe Leu 515 520 525

Phe Ala Ser Ser Phe Lys Gly Asn Thr Gln Ile Tyr Lys His Val Ile 530 535 540

Val Asp Leu Ser Ala 545

<210> 1100

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1100

Met Gly Asn Ala Cys Ile Pro Leu Lys Arg Ile Ala Tyr Phe Leu Cys 1 5 10 15

Leu Leu Ser Ala Leu Leu Thr Glu Gly Lys Lys Pro Ala Asn Gln  $20 \ \ 25 \ \ 30$ 

Asn Ala Leu Pro Cys Val Leu Val Pro Lys Ile Met Leu Tyr Val Arg 35 40 45

Met Pro Asp Pro Phe His Ala Pro Phe Leu Leu Met Leu Ser His Tyr 50 60

Pro. Leu 65

<210> 1101

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1101

Met Leu Ile Tyr Trp Leu Gln Ser Ser Phe Ile Leu Ser Ala Phe Val 1 5 10 15

Leu Ile Asn Ser Pro Val Thr Thr Gly Ile Gln Lys Ser Cys Cys Lys 20 25 30

Phe Phe Pro Val Ser Ile Asn Leu Cys Phe Ala Ser Leu His Arg Met 35 40 45

Lys Val Val Thr Leu Val Ala Leu Gln Trp Leu Asn Ile Ala Leu Arg 50 55 60

Ser Ser 65

<210> 1102 <211> 170

<212> PRT

<213> Homo sapiens

<400> 1102

Met Ala Thr Ala Met Asp Trp Leu Pro Trp Ser Leu Leu Leu Phe Ser 1 5 10 15

Leu Met Cys Glu Thr Ser Ala Phe Tyr Val Pro Gly Val Ala Pro Ile 20 25 30

Asn Phe His Gln Asn Asp Pro Val Glu Ile Lys Ala Val Lys Leu Thr 35 40 45

Ser Ser Arg Thr Gln Leu Pro Tyr Glu Tyr Tyr Ser Leu Pro Phe Cys 50 55 60

Gln Pro Ser Lys Ile Thr Tyr Lys Ala Glu Asn Leu Gly Glu Val Leu 65 70 75 80

Arg Gly Asp Arg Ile Val Asn Thr Pro Phe Gln Val Leu Met Asn Ser 85 90 95

Glu Lys Lys Cys Glu Val Leu Cys Ser Gln Ser Asn Lys Pro Val Thr 100 105 110

Leu Thr Val Glu Gln Ser Arg Leu Val Ala Glu Arg Ile Thr Glu Asp 115 120 125

.Tyr Tyr Val His Leu Ile Ala Asp Asn Leu Pro Val Ala Thr Arg Leu 130 135 140

Glu Leu Tyr Ser Asn Arg Asp Ser Asp Asp Lys Lys Lys Glu Ser Asp 145 150 155

Ile Lys Trp Ala Ser Arg Trp Asp Thr Tyr 165 170

<210> 1103

<211> 151

<212> PRT

<213> Homo sapiens

<400> 1103

His Ala Ser Gly Ala Arg Arg Leu Gln Ala Pro Pro Val Pro His

1 5 10 15

Asp Pro Gln Leu Pro Ala Gly Leu Arg His Ser Ala Val Leu Tyr Asp 20 25 30

Pro His Arg His Leu Cys Ser His Ala Trp Asp Ala Val Ala Leu Gln 35 40 45

Pro Gly Ser Ser His Asp His Ser Leu Leu Pro Leu His Val His Gly 50 55 60

Gly Val Trp Arg Ile Phe Cys Trp Pro Ser Val Pro His Phe Lys Arg 65 70 75 80

Pro Ser Val Glu Glu Arg Ser Leu Leu Tyr Gly Asn Ser Val Pro Trp

85 90 95

Cys Gly Phe Trp His Leu Leu Arg Ile Glu Leu Leu His Leu Gly Lys 100 105 110

Ala Leu Ile Arg Ser Gly Ala Leu Ser His His Gly Gly Ser Ala Val 115 120 125

His Val Val Arg Asp Leu Pro Ala Pro Arg Leu Leu Gly Leu Leu 130 135 140

Arg Leu Pro Lys Ala Ala Ile 145 150

<210> 1104

<211> 11

<212> PRT

<213> Homo sapiens

<400> 1104

Met Ser Gly Gly Leu Ser Phe Leu Leu Leu Val 1 5 10

<210> 1105

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1105

Ser Thr Cys Cys Gly Trp Gly Pro Leu Gly His Ser Arg Val Arg Gly 1 5 10 15

Cys His Cys His Leu Gly His Val Gly Arg His Gln His Phe Val Val 20 25 30

Thr Asn Ser Thr Val Thr Asn Ile Phe Gly Gln Ile Pro Phe Tyr Thr 35 40 45

Ser Arg Gln Leu Leu Val Cys Asn Pro Thr Gly Gln Arg Glu Gly Pro 50 60

Val Thr Trp Leu Ser His Cys Pro Ala Pro Gln Met Val Leu Gly Leu 65 70 75 80

Leu Phe Ser Leu Gly Pro Ala Asn Thr Thr Val Phe Thr Ser Ala His
85 90 95

Trp Leu Ser Ala Val Val Pro Gly Ser Gln Trp His Val Ser Pro Arg

Ser Ser Leu Ile Pro Gln His Thr Pro Lys Gly Ser Val Ala Asn Thr 115 120 125

Leu Asn

130

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<210> 1106
<211> 122
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (19)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (73)
<223> Xaa equals any amino acid
<400> 1106
Lys Ala Pro Ser Ser His Pro Gly Leu Thr Cys Val Ser Leu Ser Arg
Leu Gln Xaa Ser Leu Ser Leu Cys Phe Pro Ser Gly Pro Cys Trp Ala
Gly Leu Leu Ser Ser Leu Ala Leu Ala Gly Gly Ala Pro Gly Ala Leu
                            40
Pro Pro Trp Gln Pro Gly Gln Asp Ser Lys Met Arg Thr Ala Glu Leu
Val Gly Gly Ser His Gly Pro Ala Xaa Gly Pro Gly Glu Ala Glu Pro
Glu Pro Thr Ala Val Val Leu Trp Thr Val Asp Pro Glu Gly Gly Leu
Gly Gln Val Pro Ala Glu Gly Pro Gly Gly Leu Cys Val Pro Leu Gly
Pro Gly Ala Leu Val Thr Trp Thr Pro Gly
<210> 1107
<211> 243
<212> PRT
<213> Homo sapiens
<400> 1107
Met Gly Thr Leu Pro Trp Leu Leu Ala Phe Phe Ile Leu Gly Leu Gln
Ala Trp Asp Thr Pro Thr Ile Val Ser Arg Lys Glu Trp Gly Ala Arg
Pro Leu Ala Cys Arg Ala Leu Leu Thr Leu Pro Val Ala Tyr Ile Ile
```

Thr Asp Gln Leu Pro Gly Met Gln Cys Gln Gln Gln Ser Val Cys Ser

55

50

Gln Met Leu Arg Gly Leu Gln Ser His Ser Val Tyr Thr Ile Gly Trp 80 
Cys Asp Val Ala Tyr Asn Phe Leu Val Gly Asp Asp Gly Arg Val Tyr 95 
Glu Gly Val Gly Trp Asn Ile Gln Gly Leu His Thr Gln Gly Tyr Asn 110 
Asn Ile Ser Leu Gly Ile Ala Phe Phe Gly Asn Lys Ile Ser Ser Ser 125 
Pro Ser Pro Ala Ala Leu Ser Ala Ala Glu Gly Leu Ile Ser Tyr Ala 130 
Ile Gln Lys Gly His Leu Asp Pro Arg Tyr Ile Gln Pro Leu Leu Leu 145 
Cys Pro Asn Ile Lys Arg Ser Ala Trp Glu Ala Arg Gly Tyr Info Cys Pro Arg Ile Lys Arg Ser Ala Tyr Ile Gln Tyr Info Cys Info Cys Pro Asn Ile Lys Ash Leu Ser Tyr Ala 185 
Cys Pro Lys Met Asn Leu Pro Ala Lys Tyr Val Ile Ile Ile His Arg Asn Ile Gly Thr Ser Cys Thr Val Ser Tyr Ala 200 
Arg Asn Ile Gln Ser Phe His Met Asp Thr Arg Asn Phe Cys Asp Ile

Gly Tyr Gln

<210> 1108
<211> 154
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (150)
<223> Xaa equals any amino acid

<400> 1108
Met Ala Arg His Gly Leu Pro Leu Leu Pro Leu Leu Ser Leu Leu Val

Gly Ala Trp Leu Lys Leu Gly Asn Gly Gln Ala Thr Ser Met Val Gln

Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser Arg 35 40 45

Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala Ile 50 55 60

Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro Met 105 Lys Ser Val Leu Trp Trp Leu Pro Val Glu Lys Ala Phe Trp Arg Gln 120 Pro Ala Gly Pro Gly Ser Gly Ile Arg Glu Arg Leu Glu His Pro Val 135 Leu His Val Ser Trp Xaa Asp Ala Arg Ala 150 <210> 1109 <211> 57 <212> PRT <213> Homo sapiens <400> 1109 Met Pro Cys Thr Cys Thr Trp Arg Asn Trp Arg Gln Trp Ile Arg Pro Leu Val Ala Val Ile Tyr Leu Val Ser Ile Val Val Ala Val Pro Leu 25 Cys Val Trp Glu Leu Gln Lys Leu Glu Val Gly Ile His Thr Lys Ala Trp Phe Ile Ala Gly Ile Phe Leu Leu 50 <210> 1110 <211> 107 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (92) <223> Xaa equals any amino acid <400> 1110 Met Val Arg Tyr Thr Tyr Ser Met Leu Ser Val Ile Gly Ile Ser Tyr Ala Val Leu Thr Trp Leu Ser Gln Thr Leu Trp Met Pro Ile Tyr Pro

Leu Cys Val Leu Ala Glu Ala Phe Ala Ile Tyr Gln Ser Leu Pro Tyr 35 40 45

Phe Glu Ser Phe Gly Thr Tyr Ser Thr Lys Leu Pro Phe Asp Leu Ser

55 50 60 Ile Tyr Phe Pro Tyr Val Leu Lys Ile Tyr Leu Met Met Leu Phe Ile 70 Gly Met Tyr Phe Thr Tyr Ser His Leu Tyr Ser Xaa Arg Arg Asp Ile 90 Leu Gly Ile Phe Pro Ile Lys Lys Lys Met <210> 1111 <211> 37 <212> PRT <213> Homo sapiens Met Val Arg Tyr Thr Tyr Ser Met Leu Ser Val Ile Gly Ile Ser Tyr Ala Val Leu Thr Trp Ala Gln Ser Asn Thr Met Asp Ala Asn Leu Ser 25 Phe Val Cys Ser Cys 35 <210> 1112 <211> 46 <212> PRT <213> Homo sapiens <400> 1112 Met Lys Ser Gln Cys Tyr Ser Pro Ser Tyr Phe Ala Phe Phe Cys Leu Val Phe Phe Gln Ile Thr Ser Ala Ser Ser Gln Thr Leu Arg Gly His 25 Val Leu Cys Arg Thr Thr Leu Arg Asp Ser Ser Ala Tyr Cys 35 <210> 1113 <211> 442 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (364)

<223> Xaa equals any amino acid

Ser Ser Arg Gly Ala Gly Cys Cys Cys Cys Trp Ala Arg Trp Arg Arg Ala Val His Thr Ala Arg Gly Leu Arg Gly Arg Pro Arg Arg Gln Leu Leu Arg Pro Leu Arg Pro Ala Gln Gly Leu Ala Pro Gly Arg His Arg Leu Arg Pro Ala Val Leu Pro Leu His Leu Gln Pro Leu Pro Gly Leu Trp Gly Gly His Ala Glu Trp Ala Ala Leu Leu Tyr Tyr Gly Pro Phe Ile Val Ile Phe Gln Phe Gly Trp Ala Ser Thr Gln Ile Ser His Leu 105 Ser Leu Ile Pro Glu Leu Val Thr Asn Asp His Glu Lys Val Glu Leu Thr Ala Leu Arg Tyr Ala Phe Thr Val Val Ala Asn Ile Thr Val Tyr 135 Gly Ala Ala Trp Leu Leu His Leu Gln Gly Ser Ser Arg Val Glu 150 155 Pro Thr Gln Asp Ile Ser Ile Ser Asp Gln Leu Gly Gln Asp Val 165 Pro Val Phe Arg Asn Leu Ser Leu Leu Val Val Gly Val Gly Ala Val 180 Phe Ser Leu Leu Phe His Leu Gly Thr Arg Glu Arg Arg Pro His Ala Glu Glu Pro Gly Glu His Thr Pro Leu Leu Ala Pro Ala Thr Ala 215 220 210 Gln Pro Leu Leu Trp Lys His Trp Leu Arg Glu Pro Ala Phe Tyr Gln Val Gly Ile Leu Tyr Met Thr Thr Arg Leu Ile Val Asn Leu Ser 245 Gln Thr Tyr Met Ala Met Tyr Leu Thr Tyr Ser Leu His Leu Pro Lys 265 Lys Phe Ile Ala Thr Ile Pro Leu Val Met Tyr Leu Ser Gly Phe Leu 280 Ser Ser Phe Leu Met Lys Pro Ile Asn Lys Cys Ile Gly Arg Asn Met Thr Tyr Phe Ser Gly Leu Leu Val Ile Leu Ala Phe Ala Ala Trp Val Ala Leu Ala Glu Gly Leu Gly Val Ala Val Tyr Ala Ala Ala Val Leu Leu Gly Ala Gly Cys Ala Thr Ile Leu Val Thr Ser Leu Ala Met Thr

340 345 350

Ala Asp Leu Ile Gly Pro His Thr Asn Ser Gly Xaa Phe Val Tyr Gly 355 360 365

Ser Met Ser Phe Leu Asp Lys Val Ala Asn Gly Leu Ala Val Met Ala 370 375 380

Ile Gln Ser Leu His Pro Cys Pro Ser Glu Leu Cys Cys Arg Ala Cys 385 390 395 400

Val Ser Phe Tyr His Trp Ala Met Val Ala Val Thr Gly Gly Val Gly 405 410 415

Val Ala Ala Leu Cys Leu Cys Ser Leu Leu Leu Trp Pro Thr Arg
420 425 430

Leu Arg Arg Trp Asp Arg Asp Ala Arg Pro
435 440

<210> 1114

<211> 309

<212> PRT

<213> Homo sapiens

<220>

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<222> (26)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (84)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (111)

<223> Xaa equals any amino acid

<400> 1114

Ala Ala Asp Asn Tyr Gly Ile Pro Arg Ala Cys Arg Asn Ser Ala Arg 1 5 10 15

Ser Tyr Gly Ala Ala Trp Leu Leu Leu Xaa Pro Ala Gly Ser Ser Arg 20 25 30

Val Glu Pro Thr Gln Asp Ile Ser Ile Ser Asp Gln Leu Gly Gln 35 40 45

Asp Val Pro Val Phe Arg Asn Leu Ser Leu Leu Val Val Gly Val Gly 50 60

Ala Val Phe Ser Leu Leu Phe His Leu Gly Thr Arg Glu Arg Arg 65 70 75 80

Pro His Ala Xaa Glu Pro Gly Glu His Thr Pro Leu Leu Ala Pro Ala 85 90 95

Thr Ala Gln Pro Leu Leu Leu Trp Lys His Trp Leu Arg Glu Xaa Ala 100 105 110

- Phe Tyr Gln Val Gly Ile Leu Tyr Met Thr Thr Arg Leu Ile Val Asn 115 120 125
- Leu Ser Gln Thr Tyr Met Ala Met Tyr Leu Thr Tyr Ser Leu His Leu 130 135 140
- Pro Lys Lys Phe Ile Ala Thr Ile Pro Leu Val Met Tyr Leu Ser Gly 145 150 155 160
- Phe Leu Ser Ser Phe Leu Met Lys Pro Ile Asn Lys Cys Ile Gly Arg 165 170 175
- Asn Met Thr Tyr Phe Ser Gly Leu Leu Val Ile Leu Ala Phe Ala Ala 180 185 190
- Trp Val Ala Leu Ala Glu Gly Leu Gly Val Ala Val Tyr Ala Ala Ala 195 200 205
- Val Leu Leu Gly Ala Gly Cys Ala Thr Ile Leu Val Thr Ser Leu Ala 210 215 220
- Met Thr Ala Asp Leu Ile Gly Pro His Thr Asn Ser Gly Ala Phe Val 225 230 235 240
- Tyr Gly Ser Met Ser Phe Leu Asp Lys Val Ala Asn Gly Leu Ala Val 245 250 255
- Met Ala Ile Gln Ser Leu His Pro Cys Pro Ser Glu Leu Cys Cys Arg 260 265 270
- Ala Cys Val Ser Phe Tyr His Trp Ala Met Val Ala Val Thr Gly Gly 275 280 285
- Val Gly Val Ala Ala Ala Leu Cys Leu Cys Ser Leu Leu Trp Pro 290 295 300

Thr Arg Leu Arg Arg 305

- <210> 1115
- <211> 243
- <212> PRT
- <213> Homo sapiens
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- <222> (26)
- <223> Xaa equals any amino acid
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- <222> (84)
- <223> Xaa equals any amino acid
- <220>
- <221> SITE

<222> (111)

<223> Xaa equals any amino acid

<400> 1115

Ala Ala Asp Asn Tyr Gly Ile Pro Arg Ala Cys Arg Asn Ser Ala Arg 1 5 10 15

Ser Tyr Gly Ala Ala Trp Leu Leu Leu Xaa Pro Ala Gly Ser Ser Arg . 20 25 30

Val Glu Pro Thr Gln Asp Ile Ser Ile Ser Asp Gln Leu Gly Gln 35 40 45

Asp Val Pro Val Phe Arg Asn Leu Ser Leu Leu Val Val Gly 50 55 60

Ala Val Phe Ser Leu Leu Phe His Leu Gly Thr Arg Glu Arg Arg 65 70 75 80

Pro His Ala Xaa Glu Pro Gly Glu His Thr Pro Leu Leu Ala Pro Ala 85 90 95

Thr Ala Gln Pro Leu Leu Leu Trp Lys His Trp Leu Arg Glu Xaa Ala 100 105 110

Phe Tyr Gln Val Gly Ile Leu Tyr Met Thr Thr Arg Leu Ile Val Asn 115 120 125

Leu Ser Gln Thr Tyr Met Ala Met Tyr Leu Thr Tyr Ser Leu His Leu 130 135 140

Pro Lys Lys Phe Ile Ala Thr Ile Pro Leu Val Met Tyr Leu Ser Gly 145 150 155

Phe Leu Ser Ser Phe Leu Met Lys Pro Ile Asn Lys Cys Ile Gly Arg 165 170 175

As Met Thr Tyr Phe Ser Gly Leu Leu Val Ile Leu Ala Phe Ala Ala 180 185 190

Trp Val Ala Leu Ala Glu Gly Leu Gly Val Ala Val Tyr Ala Ala Ala 195 200 205

Val Leu Leu Gly Ala Gly Cys Ala Thr Ile Leu Val Thr Ser Leu Ala 210 215 220

Met Thr Ala Asp Leu Ile Gly Pro His Thr Asn Ser Gly Leu Ser Cys 225 230 235 240

Thr Ala Pro

<210> 1116

<211> 47

<212> PRT

<213> Homo sapiens

<400> 1116

Met Leu Ser Ile Ile Pro Asn Asp Arg Leu Phe Ile Asn Leu Ile Phe

1 5 10 15

Leu Ser Asn Phe Leu Pro Ser Val Leu Trp Glu Pro Ala Gly Gln Met
20 25 30

Trp Tyr Thr His Val Arg Tyr Pro Ser Gly Arg Leu Leu Ser Leu 35 40 45

<210> 1117

<211> 148

<212> PRT

<213> Homo sapiens

<400> 1117

Met Ala Gly Ser Pro Leu Leu Trp Gly Pro Arg Ala Gly Gly Val Gly 1 5 10 15

Leu Leu Val Leu Leu Leu Leu Gly Leu Phe Arg Pro Pro Pro Ala Leu 20 25 30

Cys Ala Arg Pro Val Lys Glu Pro Arg Gly Leu Ser Ala Ala Ser Pro  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Pro Leu Ala Arg Leu Ala Leu Leu Ala Ala Ser Gly Gln Cys Pro 50 55 60

Glu Val Arg Arg Gly Arg Cys Arg Pro Gly Ala Gly Ala Gly Ala 65 70 75 80

Ser Ala Gly Ala Glu Arg Gln Glu Arg Ala Arg Ala Glu Ala Gln Arg 85 90 95

Leu Arg Ile Ser Arg Arg Ala Ser Trp Arg Ser Cys Cys Ala Ser Gly
100 105 110

Ala Pro Pro Ala Thr Leu Ile Arg Leu Trp Ala Trp Thr Thr Pro 115 120 125

Thr Arg Leu Gln Arg Ser Ser Leu Ala Leu Cys Ser Ala Pro Ala Leu 130 135 140

Thr Leu Pro Pro 145

<210> 1118

<211> 65

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (24)

<223> Xaa equals any amino acid

<400> 1118

Met Cys Lys Gly Leu Lys Asn Pro Glu Gly Leu Leu Leu Leu Leu 1 5 10 15

Leu Leu Phe Thr Asp Thr Xaa Asn Ser His Cys Leu Pro Pro Tyr 20 25 30

Leu Ser Cys Phe Leu His Glu Arg Gln Pro Glu Leu Gln Ser Val Cys 35 40 45

Ile Ser Ala Ala Tyr Val Leu Ala Pro Leu Gln Asn Pro Val Ser Ser
50 55 60

Leu 65

<210> 1119

<211> 299

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (172)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (174)

<223> Xaa equals any amino acid

<400> 1119

Gly Gly Glu Glu Gly Glu Gly Ala Glu Ile Ser Gly Leu Gly
1 5 10 15

Ala Gly Arg Arg Ser Ala Pro Ile Ala Val Gly Leu Gly Phe Leu Gly 20 25 30

Val Gly Gly Arg Gly Gly Ser Asp Met Glu Ala Asn Gly Ser Gln Gly 35 40 45

Thr Ser Gly Ser Ala Asn Asp Ser Gln His Asp Pro Gly Lys Met Phe 50 55 60

Ile Gly Gly Leu Ser Trp Gln Thr Ser Pro Asp Ser Leu Arg Asp Tyr 65 70 75 80

Phe Ser Lys Phe Gly Glu Ile Arg Glu Cys Met Val Met Arg Asp Pro

Thr Thr Lys Arg Ser Arg Gly Phe Gly Phe Val Thr Phe Ala Asp Pro 100 105 110

Ala Ser Val Asp Lys Val Leu Gly Gln Pro His His Glu Leu Asp Ser 115 120 125

Lys Thr Ile Asp Pro Lys Val Ala Phe Pro Arg Arg Ala Gln Pro Lys 130 135 140

Met Val Thr Arg Thr Lys Lys Ile Phe Val Gly Gly Leu Ser Ala Asn 145 150 155 160

Thr Val Val Glu Asp Val Lys Gln Tyr Phe Glu Xaa Phe Xaa Lys Val 165 170 175

Glu Asp Ala Met Leu Met Phe Asp Lys Thr Thr Asn Arg His Arg Gly 180 \$180\$

Phe Gly Phe Val Thr Phe Glu Asn Glu Asp Val Val Glu Lys Val Cys 195 200 205

Glu Ile His Phe His Glu Ile Asn Asn Lys Met Val Glu Cys Lys Lys 210 215 220

Ala Gln Pro Lys Glu Val Met Phe Pro Pro Gly Thr Arg Gly Arg Ala 225 230 . 235 240

Arg Gly Leu Pro Tyr Thr Met Asp Ala Phe Met Leu Gly Met Gly Met 245 250 255

Leu Gly Glu Ser Gly Gln Asp Arg Arg Ser Pro Trp Thr Gly Arg Ala 260 265 270

Met Glu Ala Ser Thr Pro Asn Trp Val Thr Tyr Gln Trp Gly Lys Leu 275 280 285

Leu His Leu Ser Lys Pro Gln Phe Pro Cys Leu 290 295

<210> 1120

<211> 215

<212> PRT

<213> Homo sapiens

<400> 1120

Met Tyr Leu Ser Ile Ile Phe Leu Ala Phe Val Ser Ile Asp Arg Cys
1 5 10 15

Leu Gln Leu Thr His Ser Cys Lys Ile Tyr Arg Ile Gln Glu Pro Gly
20 25 30

Phe Ala Lys Met Ile Ser Thr Val Val Trp Leu Met Val Leu Leu Ile 35 40 45

Met Val Pro Asn Met Met Ile Pro Ile Lys Asp Ile Lys Glu Lys Ser 50 60

Asn Val Gly Cys Met Glu Phe Lys Lys Glu Phe Gly Arg Asn Trp His 65 70 75 80

Leu Leu Thr Asn Phe Ile Cys Val Ala Ile Phe Leu Asn Phe Ser Ala

Ile Ile Leu Ile Ser Asn Cys Leu Val Ile Arg Gln Leu Tyr Arg Asn 100 105 110

Lys Asp Asn Glu Asn Tyr Pro Asn Val Lys Lys Ala Leu Ile Asn Ile 115 120 125

Leu Leu Val Thr Thr Gly Tyr Ile Ile Cys Phe Val Pro Tyr His Ile 130 135 140

Val Arg Ile Pro Tyr Thr Leu Ser Gln Thr Glu Val Ile Thr Asp Cys Ser Thr Arg Ile Ser Leu Phe Lys Ala Lys Glu Ala Thr Leu Leu Leu Ala Val Ser Asn Leu Cys Phe Asp Pro Ile Leu Tyr Tyr His Leu Ser 185 Lys Ala Phe Arg Ser Lys Val Thr Glu Thr Phe Ala Ser Pro Lys Glu 200 Thr Lys Val Arg Lys Lys Asn 210 <210> 1121 <211> 77 <212> PRT <213> Homo sapiens <400> 1121 Met Leu Leu Ala Thr Leu Leu Leu Leu Leu Gly Gly Ala Leu Ala His Pro Asp Arg Ile Ile Phe Pro Asn His Ala Cys Glu Asp Pro Pro Ala Val Leu Glu Val Gln Gly Thr Leu Gln Arg Pro Leu Val Arg Asp Ser Arg Thr Ser Pro Ala Asn Cys Thr Trp Leu Thr Lys Arg Val Gln Gln Met Leu Leu Phe His Ser Tyr Gly Ile Ala Gln 70 <210> 1122 <211> 306 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (171) <223> Xaa equals any amino acid <220> <221> SITE <222> (180) <223> Xaa equals any amino acid <220> <221> SITE <222> (182)

<223> Xaa equals any amino acid

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<222> (208)
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<222> (219)
<223> Xaa equals any amino acid
<400> 1122
Met Ala Leu Arg Leu Leu Arg Arg Ala Ala Arg Gly Ala Ala Ala Ala
Ala Leu Leu Arg Leu Lys Ala Ser Leu Ala Ala Asp Ile Pro Arg Leu
             20
                                 25
Gly Tyr Ser Ser Ser His His Lys Tyr Ile Pro Arg Arg Ala Val
Leu Tyr Val Pro Gly Asn Asp Glu Lys Lys Ile Lys Lys Ile Pro Ser
    50
Leu Asn Val Asp Cys Ala Val Leu Asp Cys Glu Asp Gly Val Ala Ala
Asn Lys Lys Asn Glu Ala Arg Leu Arg Ile Val Lys Thr Leu Glu Asp
                85
Ile Asp Leu Gly Pro Thr Glu Lys Cys Val Arg Val Asn Ser Val Ser
Ser Gly Leu Ala Glu Glu Asp Leu Glu Thr Leu Leu Gln Ser Arg Val
Leu Pro Ser Ser Leu Met Leu Pro Lys Val Glu Ser Pro Glu Glu Ile
                        135
Gln Trp Ala Val Cys Glu Glu Thr Leu Lys Val Gly Pro Gln Val Gly
                    150
                                        155
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Leu Phe Leu Asp Ala Val Arg Phe Trp Arg Xaa Arg Leu Ser Ser His
165 170 175

Ile Gly Ala Xaa Ser Xaa Lys Glu Thr Leu Asp Xaa Leu Tyr Ala Arg 180 185 190

Gln Lys Ile Val Val Ile Ala Lys Ala Phe Gly Leu Gln Ala Val Xaa 195 200 205

Leu Xaa Xaa Ile Asp Phe Arg Asp Gly Xaa Xaa Leu Leu Arg Gln Ser 210 215 220

Arg Glu Gly Ala Ala Met Gly Phe Thr Gly Lys Gln Val Ile His Pro 225 230 235 240

Asn Gln Ile Ala Val Val Gln Glu Gln Phe Ser Pro Ser Pro Glu Lys 245 250 255

Ile Lys Trp Ala Glu Glu Leu Ile Ala Ala Phe Lys Glu His Gln Gln 260 265 270

Leu Gly Lys Gly Ala Phe Thr Phe Gln Gly Ser Met Ile Asp Met Pro 275 280 285

Leu Leu Lys Gln Ala Gln Asn Thr Val Thr Leu Ala Thr Ser Ile Lys 290 295 300

Glu Lys 305

<210> 1123

<211> 406

<212> PRT

<213> Homo sapiens

<400> 1123

Met His Pro Ala Val Phe Leu Ser Leu Pro Asp Leu Arg Cys Ser Leu 1 5 10 15

Leu Leu Val Thr Trp Val Phe Thr Pro Val Thr Thr Glu Ile Thr 20 25 30

Ala Leu Val Asn Phe Tyr Ala Asp Trp Cys Arg Phe Ser Gln Met Leu 50 60

His Pro Ile Phe Glu Glu Ala Ser Asp Val Ile Lys Glu Glu Phe Pro 65 70 75 80

Asn Glu Asn Gln Val Val Phe Ala Arg Val Asp Cys Asp Gln His Ser 85 90 95

Asp Ile Ala Gln Arg Tyr Arg Ile Ser Lys Tyr Pro Thr Leu Lys Leu 100 105 110

Phe Arg Asn Gly Met Met Lys Arg Glu Tyr Arg Gly Gln Arg Ser

115 120 125

Val Lys Ala Leu Ala Asp Tyr Ile Arg Gln Gln Lys Ser Asp Pro Ile 130 135 140

Gln Glu Ile Arg Asp Leu Ala Glu Ile Thr Thr Leu Asp Arg Ser Lys 145 150 155 160

Arg Asn Ile Ile Gly Tyr Phe Glu Gln Lys Asp Ser Asp Asn Tyr Arg 165 170 175

Val Phe Glu Arg Val Ala Asn Ile Leu His Asp Asp Cys Ala Phe Leu 180 185 190

Ser Ala Phe Gly Asp Val Ser Lys Pro Glu Arg Tyr Ser Gly Asp Asn 195 200 205

Ile Ile Tyr Lys Pro Pro Gly His Ser Ala Pro Asp Met Val Tyr Leu 210 215 220

Gly Ala Met Thr Asn Phe Asp Val Thr Tyr Asn Trp Ile Gln Asp Lys 225 230 235 240

Cys Val Pro Leu Val Arg Glu Ile Thr Phe Glu Asn Gly Glu Glu Leu 245 250 255

Thr Glu Glu Gly Leu Pro Phe Leu Ile Leu Phe His Met Lys Glu Asp 260 265 270

Thr Glu Ser Leu Glu Ile Phe Gln Asn Glu Val Ala Arg Gln Leu Ile 275 280 285

Ser Glu Lys Gly Thr Ile Asn Phe Leu His Ala Asp Cys Asp Lys Phe 290 295 300

Arg His Pro Leu Leu His Ile Gln Lys Thr Pro Ala Asp Cys Pro Val 305 310 315 320

Ile Ala Ile Asp Ser Phe Arg His Met Tyr Val Phe Gly Asp Phe Lys 325 330 335

Asp Val Leu Ile Pro Gly Lys Leu Lys Gln Phe Val Phe Asp Leu His 340 345 350

Ser Gly Lys Leu His Arg Glu Phe His His Gly Pro Asp Pro Thr Asp 355 360 365

Thr Ala Pro Gly Glu Gln Ala Gln Asp Val Ala Ser Ser Pro Pro Glu 370 375 380

Ser Ser Phe Gln Lys Leu Ala Pro Ser Glu Tyr Arg Tyr Thr Leu Leu 385 390 395 400

Arg Asp Arg Asp Glu Leu 405

<210> 1124

<211> 64

<212> PRT

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<213> Homo sapiens
<400> 1124
Met Val Ser Pro Leu Ile Ser Ala Leu Phe His Val Pro Phe Leu Trp
     5
                                 10
Leu Gly Met Phe Pro His Ser Leu Ser Gly Pro Phe Pro Ser His
                              25
           20
Leu Arg Arg Ala Ser Ser Ser Arg Lys Pro Leu Val Lys Pro Pro Arg
       35 40
Ala Arg Gln Tyr Pro Pro Leu Ala Ser Ser Gly Tyr Arg Gly Arg Ile
                      55
<210> 1125
<211> 26
<212> PRT
<213> Homo sapiens
<400> 1125
Met Ser Phe Pro His Ala Ser Thr Leu Pro Phe His Lys Leu Ser Asp
1 5 10
Leu Gln His Thr Leu Pro Asn His Gln Gly
           20
<210> 1126
<211> 50
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (4)
<223> Xaa equals any amino acid
<220>
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<222> (10)
<223> Xaa equals any amino acid
<220>
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<222> (22)
<223> Xaa equals any amino acid
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<223> Xaa equals any amino acid

<220> <221> SITE

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<222> (39)
<223> Xaa equals any amino acid
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<223> Xaa equals any amino acid
<400> 1126
Val His Ala Xaa Thr Pro Phe Ala Gly Xaa Cys Phe Asp Pro Val Ser
Leu Tyr Trp Cys Tyr Xaa Asn Pro Gly Thr His Cys Tyr Pro Thr Leu
Arg Gly Xaa Glu Gln Arg Xaa Pro Ser Xaa Arg Ser His Ile Val Leu
                            40
Arg Ser
    50
<210> 1127
<211> 103
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (77)
<223> Xaa equals any amino acid
<400> 1127
Met Ala Phe Leu Leu Glu Arg Ser Gly Thr Leu Leu Ile Cys Ser Met
                          10
Trp Trp His His Gly Tyr Ser Asn Ile Thr Gly Thr Glu Gly Glu Arg
Arg Asn Leu Lys Arg Asn Lys Thr Asn Phe Arg Arg Phe Gln Asp Gly
                             40
     35
Arg Ile Gly Thr Ala Pro Val Tyr Ser Ser Gln Cys Glu Arg Cys Arg
Arg Trp Val Ile Ser Ala Phe Pro Thr Glu Gln Thr Xaa His Gln Lys
Ile Ile Ser His Ala Trp Leu Gly Gly Ser His Ala His Gly Ala Ser
                                    90
Leu Ile Ala Ser Thr Ala Val
            100
`<210> 1128
<211> 18
<212> PRT
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713

<213> Homo sapiens

Ile Pro Asn Glu Met Ala Gly Ser Ile Trp Pro Leu Gly Tyr Leu Ala

<400> 1128

Thr Leu <210> 1129 <211> 188 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (85) <223> Xaa equals any amino acid <220> <221> SITE <222> (104) <223> Xaa equals any amino acid <220> <221> SITE <222> (164) <223> Xaa equals any amino acid <400> 1129 Met Arg Pro Ala Phe Ala Leu Cys Leu Leu Trp Gln Ala Leu Trp Pro Gly Pro Gly Gly Glu His Pro Thr Ala Asp Arg Ala Gly Cys Ser Ala Ser Gly Ala Cys Tyr Ser Leu His His Ala Thr Met Lys Arg Gln Ala Ala Glu Glu Ala Cys Ile Leu Arg Gly Gly Ala Leu Ser Thr Val Arg Ala Gly Ala Glu Leu Arg Ala Val Leu Ala Leu Leu Arg Ala Gly Pro Gly Pro Gly Xaa Gly Ser Lys Asp Leu Leu Phe Trp Val Ala Leu Glu Arg Arg Arg Ser His Cys Xaa Leu Glu Asn Glu Pro Leu Arg Gly 105 Phe Ser Trp Leu Ser Ser Asp Pro Gly Gly Leu Glu Ser Asp Thr Leu Gln Trp Val Glu Glu Pro Gln Arg Ser Cys Thr Ala Arg Arg Trp Val Leu Pro Gly His Arg Trp Gly Arg Ala Arg Ser Trp Lys Glu Met Arg

150

Cys His Leu Xaa Ala Asn Ala Thr Cys Ala Ser Thr Ser Leu Arg Ser 165 170 175

Cys Val Leu Arg Arg Ala Pro Gly Pro Pro Leu Thr 180 185

<210> 1130

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1130

Met Pro Pro His Arg Gln Thr Asp Gly Gln Met Gly Leu Pro Ala Pro
1 5 10 15

Ala Leu Trp Val Trp Gly Leu Leu Leu Ser Ser Ser Phe Gln Thr Leu 20 25 30

Leu Pro Ala Phe Pro Lys Pro Pro Ala Leu Asn Leu Gly Cys Ser Thr 35 40 45

Arg Pro Ile Pro Ser Phe Leu Lys Ile 50 55

<210> 1131

<211> 93

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (24)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (65)

<223> Xaa equals any amino acid

<400> 1131

Gln Val Ser Leu Pro Thr Arg Leu Leu Gln Met Pro Gly Met Gly Leu
1 5 10 15

Asp Ser Arg Phe Gln Ala Trp Xaa Pro Ser Pro Tyr Leu Gly Pro Gln 20 25 30

Pro Arg Ala Pro Arg Pro Gly Leu Gln Pro Gly Pro Ser Leu Arg Gly
35 40 45

Ala Glu Phe Arg Glu Ser Cys Pro Arg Ser Gln Lys Arg Gly Arg Glu
50 60

Xaa Gly Arg Pro Cys Pro Gly Cys Arg Pro Gly Gly Trp Gly Leu Pro 65 70 75 80

Ala Arg Leu Gly Gln Pro Gln Leu Gln Thr Gly Pro Gly

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<210> 1132
<211> 36
<212> PRT
<213> Homo sapiens
<400> 1132
Met Ala Gly His Pro Thr Leu Ile Leu Leu Cys Lys Trp Ala Phe His
Leu Thr Gly Ala Ile Cys Glu Pro Tyr Leu Asn Gln Thr Leu Pro Thr
                                 25
Gln Ala Cys Leu
         35
<210> 1133
<211> 28
<212> PRT
<213> Homo sapiens
<400> 1133
Leu Leu Cys Lys Phe Lys Lys Val Asn Tyr Phe Leu Lys Val Leu
Ile Ser Asn Phe Ser Ile Trp Ala Tyr Asp His His
           20
<210> 1134
<211> 34
<212> PRT
<213> Homo sapiens
<400> 1134
Cys Lys Trp Val Gln Asn Gly Gly His Pro Asn Val Glu Ser Ser Lys
Tyr His Cys His Glu Pro Lys Ala Ser Leu Tyr Thr Leu Glu Glu Ser
Thr Leu
<210> 1135
<211> 172
<212> PRT
<213> Homo sapiens
<220>
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<222> (170)
<223> Xaa equals any amino acid
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<400> 1135

Met Arg Gly Ser Val Glu Cys Thr Trp Gly Trp Gly His Cys Ala Pro 1 5 10

Ser Pro Leu Leu Leu Trp Thr Leu Leu Leu Phe Ala Ala Pro Phe Gly 20 25 30

Leu Leu Gly Glu Lys Thr Arg Gln Leu Leu Glu Phe Asp Ser Thr Asn 35 40 45

Val Ser Asp Thr Ala Ala Lys Pro Leu Gly Arg Pro Tyr Pro Pro Tyr 50 55 60

Ser Leu Ala Asp Phe Ser Trp Asn Asn Ile Thr Asp Ser Leu Asp Pro 65 70 75 80

Ala Thr Leu Ser Ala Thr Phe Gln Gly His Pro Met Asn Asp Pro Thr 85 90 95

Arg Thr Phe Ala Asn Gly Ser Leu Ala Phe Arg Val Gln Ala Phe Ser 100 105 110

Arg Ser Ser Arg Pro Ala Gln Pro Pro Arg Leu Leu His Thr Ala Asp 115 120 125

Thr Cys Gln Leu Glu Val Ala Leu Ile Gly Ala Ser Pro Arg Gly Asn 130 135 140

Arg Ser Leu Phe Gly Leu Glu Val Ala Thr Leu Gly Gln Gly Pro Asp 145 150 155 160

Cys Pro Ser Met Gln Glu Gln His Ser Xaa Glu Arg 165 170

<210> 1136

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1136

Met Arg Gly Ser Val Glu Cys Thr Trp Gly Trp Gly His Cys Ala Pro 1 5 10 15

Ser Pro Leu Leu Trp Thr Leu Leu Phe Ala Ala Pro Phe Gly 20 . 25 30

Leu Leu Gly Glu Lys Thr Arg Gln Leu Leu Glu Phe Asp Ser Thr Asn \$35\$ \$40\$ \$45\$

Val Ser Asp Thr Ala Ala Lys Pro Leu Gly Arg Pro Tyr Pro Pro Tyr 50 55 60

Ser Leu Ala Asp Phe Ser Trp Asn Asn Ile Thr Asp Ser Leu Asp Pro 65 70 75 80

Ala Thr Leu Ser Ala Thr Phe Gln Gly His Pro Met Asn Asp Pro Thr 85 90 95

Arg Thr Phe Ala Asn Gly Ser Leu Ala Phe Arg Ser Arg Pro Phe Pro

100 105 110

Gly Pro Ala Asp Gln Pro Asn Pro Leu Ala Ser Cys Thr Gln Gln Thr 115 120 125

Pro Val Ser 130

<210> 1137

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1137

Met Cys Phe Leu Met Ile Phe Thr Phe Leu Val Cys Trp Met Pro Tyr 1 5 10 15

Ile Val Ile Cys Phe Leu Val Val Asn Gly His Gly His Leu Val Thr
20 25 30

Pro Thr Ile Ser Ile Val Ser Tyr Leu Phe Ala Lys Ser Asn Thr Val 35 40

Tyr Asn Pro Val Ile Tyr Val Phe Met Ile Arg Lys Phe Arg Arg Ser 50 60

Leu Leu Gln Leu Leu Cys Leu Arg Leu Leu Arg Cys Gln Arg Pro Ala 65 70 75 80

Lys Asp Leu Pro Ala Ala Gly Ser Glu Met Gln Ile Arg Pro Ile Val 85 90 95

Met Ser Gln Lys Asp Gly Asp Arg Pro Lys Lys Ser Asp Phe Gln Leu 100 105 110

Phe Phe His His Phe Tyr His His Gln 115 120

<210> 1138

<211> 49

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (41)

<223> Xaa equals any amino acid

<400> 1138

Met Gly Ala His Ser Phe Gly Phe Gln Leu Phe Met Ser Val Ser Val 1 5 10 15

Leu Trp Gly Arg Leu Cys Leu Tyr Gly Arg Phe Ser Val Ile Thr Phe 20 25 30

Ala Ser Pro Pro Thr Thr Phe Met Xaa Ile Gln Cys Cys Ser His Cys 35 40 45

Ser

<210> 1139

<211> 148

<212> PRT

<213> Homo sapiens

<400> 1139

Met Val Trp Phe Ser Cys Trp Leu Leu Thr Gln Ser Ile Thr Val Ile 1 5 10 15

Leu Gly Ala Arg Gly Arg Tyr Gly Arg Leu Cys Val Leu Gln Gly Arg 20 25 30

His Cys Gly Leu Val Asp Lys Ser Gly Ser Pro Asn Pro Phe Ser Ala 35 40 45

Asp Val Leu Ala Val His Ser Gly Gln Val Ser His Ser Pro Glu Pro 50 55 60

Gln Arg Leu Tyr Gln Tyr Asp Glu Asn Lys Tyr Ser Thr Cys Leu Pro 65 70 75 80

His Gly Val Val Ser Ala Val Asn Glu Ile Met Tyr Met Lys His Leu 85 90 95

Val Tyr Leu Ala Pro Asn Lys Ser Ser Thr Thr Ser Ser Leu Ile Thr
100 105 110

Asn Lys Met Glu Leu Glu Gly Cys Ile Ser Leu Asn Lys Ile Leu Arg 115 120 125

Gln Ile Leu Gly Val Pro Val Phe Ile Leu Gln Leu Glu Ser Pro Pro 130 135 140

Ser Leu Phe Gly 145

<210> 1140

<211> 484

<212> PRT

<213> Homo sapiens

<400> 1140

Met Pro Arg His Leu Ser Gly Leu Leu Leu Leu Leu Trp Pro Leu Leu 1 5 10 15

Leu Leu Pro Pro Thr Pro Ala Ala Pro Gly Pro Leu Ala Arg Pro 20 25 30

Gly Leu Arg Arg Leu Gly Thr Arg Gly Pro Gly Gly Ser Pro Gly Arg
35 40 45

Arg Pro Gly Ser Ala Val Pro Thr Arg Ala Pro Tyr Ser Gly Ala Gly 50 55 60

Gln 65	Pro	Gly	Gly	Ala	Arg 70	Gly	Ala	Gly	Val	Cys 75	Arg	Ser	Arg	Pro	Leu 80
Asp	Leu	Val	Phe	Ile 85	Ile	Asp	Ser	Ser	Arg 90	Ser	Val	Arg	Pro	Leu 95	Glu
Phe	Thr	Lys	Val 100	Lys	Thr	Phe	Val	Ser 105	Gln	Ile	Ile	Asp	Thr 110	Leu	Asp
Ile	Gly	Ala 115	Ala	Asp	Thr	Arg	Val 120	Ala	Val	Val	Asn	Туг 125	Ala	Ser	Thr
Val	Lys 130	Ile	Glu	Phe	His	Leu 135	Gln	Thr	His	Ser	Asp 140	Lys	Gln	Ser	Leu
Lys 145	Gln	Ala	Val	Ala	Arg 150	Ile	Thr	Pro	Leu	Ser 155	Thr	Gly	Thr	Met	Ser 160
Gly	Leu	Ala	Ile	Gln 165	Thr	Ala	Met	Asp	Glu 170	Ala	Phe	Thr	Val	Glu 175	Ala
Gly	Ala	Arg	Gly 180	Pro	Thr	Ser	Asn	Ile 185	Pro	Lys	Val	Ala	Ile 190	Ile	Val
Thr	Asp	Gly 195	Arg	Pro	Gln	Asp	Gln 200	Val	Asn	Glu	Val	Ala 205	Ala	Arg	Ala
Arg	Ala 210	Ser	Gly	Ile	Glu	Leu 215	Tyr	Ala	Val	Gly	Val 220	Asp	Arg	Ala	Asp
Met 225	Glu	Ser	Leu	Lys	Met 230	Met	Ala	Ser	Glu	Pro 235	Leu	Asp	Glu	His	Val 240
Phe	Tyr	Val	Glu	Thr 245	Tyr	Gly	Val	Ile	Glu 250	Lys	Leu	Ser	Ser	Arg 255	Phe
Gln	Glu	Thr	Phe 260	Cys	Ala	Leu	Asp	Pro 265	Cys	Val	Leu	Gly	Thr 270	His	Arg
Cys		His 275	Val	Cys	Val	Ser	Asp 280	Gly	Glu	Gly	Lys	His 285	His	Cys	Glu
Cys	Ser 290	Gln	Gly	Tyr	Ser	Leu 295	Asn	Ala	Asp	Gln	Lys 300	Thr	Cys	Ser	Ala
Ile 305	Asp	Lys	Cys	Ala	Leu 310	Asn	Thr	His	Gly	Cys 315	Glu	His	Ile	Cys	Val 320
Asn	Asp	Arg	Thr	Gly 325	Ser	Tyr	His	Суз	Glu 330	Cys	Tyr	Glu	Gly	Tyr 335	Thr
Leu	Asn	Gln	Asp 340	Arg	Lys	Thr	Cys	Ser 345	Ala	Gln	Asp	Gln	Cys 350	Ala	Phe
Gly	Thr	His 355	Gly	Cys	Gln	His	Ile 360	Cys	Val	Asn	Asp	Arg 365	Asp	Gly	Ser
His	His 370	Cys	Glu	Cys	Tyr	Glu 375	Gly	Tyr	Thr	Leu	Asn 380	Ala	Asp	Asn	Lys

Thr Cys Ser Val Arg Ser Glu Cys Ala Gly Gly Ser His Gly Cys Gln 390 395 His Leu Cys Val Asp Asp Gly Pro Ala Ala Tyr His Cys Asp Cys Phe 410 Pro Gly Tyr Thr Leu Thr Glu Asp Arg Arg Thr Cys Ala Ala Ile Glu Glu Ala Arg Arg Leu Val Ser Thr Glu Asp Ala Cys Gly Cys Glu Ala 440 Thr Leu Ala Phe Gln Glu Arg Ala Ser Ser Tyr Leu Gln Arg Leu Asn Ala Lys Leu Asp Asp Ile Leu Gly Lys Leu Gln Ala Asp Ala Tyr Gly 465 470 475 Gln Ile His Arg <210> 1141 <211> 266 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (45) <223> Xaa equals any amino acid <220> <221> SITE <222> (47) <223> Xaa equals any amino acid <220> <221> SITE <222> (51) <223> Xaa equals any amino acid <220> <221> SITE <222> (134) <223> Xaa equals any amino acid <220> <221> SITE <222> (183) <223> Xaa equals any amino acid <220> <221> SITE <222> (222) <223> Xaa equals any amino acid <220> <221> SITE <222> (224)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (255)

<223> Xaa equals any amino acid

<400> 1141

Met Pro Arg His Leu Ser Gly Leu Leu Leu Leu Leu Trp Pro Leu Leu 1 5 10 15

Leu Leu Pro Pro Thr Pro Ala Ala Pro Gly Pro Leu Ala Arg Pro
20 25 30

Gly Leu Arg Arg Leu Gly Thr Arg Gly Pro Gly Gly Xaa Pro Xaa Arg
35 40 45

Arg Pro Xaa Ser Ala Val Pro Thr Arg Ala Pro Tyr Ser Gly Ala Gly 50 60

Gln Pro Gly Gly Ala Arg Gly Ala Gly Val Cys Arg Ser Arg Pro Leu 65 70 75 80

Asp Leu Val Phe Ile Ile Asp Ser Ser Arg Ser Val Arg Pro Leu Glu  $85 \ \ 90 \ \ 95$ 

Phe Thr Lys Val Lys Thr Phe Val Ser Gln Ile Ile Asp Thr Leu Asp 100 105 110

Ile Gly Ala Ala Asp Thr Arg Val Ala Val Val Asn Tyr Ala Ser Thr 115 120 125

Val Lys Ile Glu Phe Xaa Leu Gln Thr His Ser Asp Lys Gln Ser Leu 130 135 140

Lys Gln Ala Val Ala Arg Ile Thr Pro Leu Ser Thr Gly Thr Met Ser 145 150 155 160

Gly Leu Ala Ile Gln Thr Ala Met Asp Glu Ala Phe Thr Val Glu Ala 165 170 175

Gly Ala Arg Gly Pro Thr Xaa Asn Ile Pro Lys Val Ala Ile Ile Val 180 185 190

Thr Asp Gly Arg Pro Gln Asp Gln Val Asn Glu Val Ala Ala Arg Ala 195 200 205

Arg Ala Ser Gly Ile Glu Leu Tyr Ala Val Gly Val Asp Xaa Ala Xaa 210 225 220

Met Glu Ser Leu Gln Asp Glu Trp Pro Ala Lys Pro Leu Asp Glu His 225 230 235 240

Val Phe Tyr Val Glu Thr Tyr Gly Val Ile Glu Lys Pro Ser Xaa Arg 245 250 255

Phe Gln Glu Thr Leu Leu Arg Ser Trp Asn 260 265

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<210> 1142
<211> 5
<212> PRT
<213> Homo sapiens
<400> 1142
Val Leu Leu Ile Leu
<210> 1143
<211> 84
<212> PRT
<213> Homo sapiens
<400> 1143
Lys Met His Phe Asn Lys Asn Lys Ser Ile Leu Lys Ser Phe Ser Phe
1
Val Arg Gly Asn Met Asn Glu Ile His Ser Tyr Leu Lys Thr Glu Tyr
Phe Thr Ala Lys Thr Leu Asn Ile Ser Arg Ala Tyr His Ile Leu Asn
Thr Leu Trp Ser Cys Ser Tyr Phe Asn Ile Pro Gly Ser Gly Gln
                         55
Leu Ala Cys Leu Trp Leu Arg Ile Cys Phe His Ala Cys Phe Leu Ser
Phe Phe Tyr Leu
<210> 1144
<211> 115
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (50)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (70)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (86)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (100)
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<223> Xaa equals any amino acid

<400> 1144 Met Gln Pro Pro Ser Leu Leu Leu Leu Val Leu Gly Leu Leu Ala Ala 10 Pro Ala Ala Ala Leu Val Arg Ile Pro Leu His Lys Phe Thr Ser Val Arg Arg Thr Met Ser Glu Leu Gly Gly Pro Val Glu Asp Leu Ile Ala Arg Xaa Pro Ile Ser Lys Tyr Ala Gln Gly Val Pro Ser Val Ala Gly Gly Pro Val Pro Glu Xaa Leu Lys Glu Thr Thr Trp Asn Ala Gln Ile Leu Arg Gly Lys Phe Xaa His Pro Gly Thr Pro Pro Arg Lys Leu Leu 85 90 Pro Pro Val Xaa Pro Phe Glu Lys Arg Gly Ser Phe Pro Thr Leu Leu 105 Gly Ser Pro 115 <210> 1145 <211> 92 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (43) <223> Xaa equals any amino acid <220> <221> SITE <222> (69) <223> Xaa equals any amino acid <220> <221> SITE <222> (70) <223> Xaa equals any amino acid <400> 1145 Leu Val Val Leu Gly Val Cys Ala Ala Gln His Glu Leu Thr Pro Arg Leu Arg Ala Gly Val Pro Val Gln Val Glu Arg Glu Asp Val Leu Leu His Gln Leu Leu His Gln Val Ile Lys Xaa Gly Lys His Ile Val Asp Arg Asp Ala Gly Val Gly His Ala Gln Asp Ala Val Glu Leu Gly

55

Arg Asp Glu Gly Xaa Xaa Arg Leu Leu Gly Gly Phe Pro Glu Arg Leu 65 70 75 80

Pro Leu His Leu Asp Ala Ser Gln Ala Arg Gln Thr 85 90

<210> 1146

<211> 368

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (310)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (365)

<223> Xaa equals any amino acid

<400> 1146

Met Gln Pro Ser Ser Leu Leu Pro Leu Ala Leu Cys Leu Leu Ala Ala 1 5 10 15

Pro Ala Ser Ala Leu Val Arg Ile Pro Leu His Lys Phe Thr Ser Ile  $20 \\ 25 \\ 30$ 

Arg Arg Thr Met Ser Glu Val Gly Gly Ser Val Glu Asp Leu Ile Ala
35 40 45

Lys Gly Pro Val Ser Lys Tyr Ser Gln Ala Val Pro Ala Val Thr Glu
50 60

Gly Pro Ile Pro Glu Val Leu Lys Asn Tyr Met Asp Ala Gln Tyr Tyr 65 70 75 80

Gly Glu Ile Gly Ile Gly Thr Pro Pro Gln Cys Phe Thr Val Val Phe  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Asp Thr Gly Ser Ser Asn Leu Trp Val Pro Ser Ile His Cys Lys Leu 100 105 110

Leu Asp Ile Ala Cys Trp Ile His His Lys Tyr Asn Ser Asp Lys Ser 115 120 125

Ser Thr Tyr Val Lys Asn Gly Thr Ser Phe Asp Ile His Tyr Gly Ser 130 135 140

Gly Ser Leu Ser Gly Tyr Leu Ser Gln Asp Thr Val Ser Val Pro Cys 145 150 155 160

Gln Ser Ala Ser Ser Ala Ser Ala Leu Gly Gly Val Lys Val Glu Arg 165 170 175

Gln Val Phe Gly Glu Ala Thr Lys Gln Pro Gly Ile Thr Phe Ile Ala 180 185 190

Ala Lys Phe Asp Gly Ile Leu Gly Met Ala Tyr Pro Arg Ile Ser Val

195 200 205

Asn Asn Val Leu Pro Val Phe Asp Asn Leu Met Gln Gln Lys Leu Val 210 215 220

Asp Gln Asn Ile Phe Ser Phe Tyr Leu Ser Arg Asp Pro Asp Ala Gln 225 230 235 240

Pro Gly Glu Leu Met Leu Gly Gly Thr Asp Ser Lys Tyr Tyr Lys 245 250 255

Gly Ser Leu Ser Tyr Leu Asn Val Thr Arg Lys Ala Tyr Trp Gln Val 260 265 270

His Leu Asp Gln Val Glu Val Ala Ser Gly Leu Thr Leu Cys Lys Glu 275 280 285

Gly Cys Glu Ala Ile Val Asp Thr Gly Thr Ser Leu Met Val Gly Pro 290 295 300

Val Asp Glu Val Arg Xaa Leu Gln Lys Ala Ile Gly Ala Val Pro Leu 305 310 315 320

Ile Gln Gly Glu Tyr Met Ile Pro Cys Glu Lys Val Ser Thr Leu Pro 325 330 335

Ala Ile Thr Leu Lys Leu Gly Gly Lys Gly Tyr Lys Leu Ser Pro Glu 340 345 350

Asp Tyr Thr Leu Lys Val Ser Gln Ala Gly Lys Thr Xaa Cys Leu Ser 355 360 365

<210> 1147

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1147

Met Leu Val Leu Phe Lys Phe Leu Pro Leu Thr Ser Ser Gly Arg Phe 1 5 10 15

Leu Ser Val Thr Leu Tyr His Arg Val His His Gln Thr Phe Phe Ala 20 25 30

Gly Ala Lys Ser Phe Ser Pro Ala Ser Thr Leu Asn Leu Tyr Ile Cys 35 40 45

Ser Ser Gln Phe Gln Ser Leu Gln Lys Leu Tyr Cys Gly Val Ile Pro 50 55 60

Val Leu Arg Tyr Ala Ser Ile Glu 65 70

<210> 1148

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<211> 67
<212> PRT
<213> Homo sapiens
<400> 1148
Met Ala Pro Ser Gly Pro Leu Leu Leu Val Leu Val Pro Leu Ala
Ala Ala Arg Pro Gly Pro Thr Ser Val Pro Ala Gly Ala Ala Ala Cys
Pro Cys Gly Gly Thr Ser Cys Arg Gly Trp Gly Ala Gly Pro Thr Pro
Gly Arg Thr Ser Thr Cys Pro His Leu Thr Cys Pro Arg Ala Gly Thr
Gly Ala Thr
65
<210> 1149
<211> 14
<212> PRT
<213> Homo sapiens
<400> 1149
Pro Gln Gly Pro Asn Asp Val Thr Ala Lys Leu Cys Pro
     5
<210> 1150
<211> 6
<212> PRT
<213> Homo sapiens
<400> 1150
Met Leu Leu Tyr Leu
1
<210> 1151
<211> 5
<212> PRT
<213> Homo sapiens
<400> 1151
Gly Glu Ile Phe Leu
             5
<210> 1152
<211> 211
<212> PRT
<213> Homo sapiens
<220>
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PCT/US02/08277

WO 03/038063 <221> SITE <222> (45) <223> Xaa equals any amino acid <220> <221> SITE <222> (195) <223> Xaa equals any amino acid <400> 1152 Met Arg Leu Phe Leu Trp Asn Ala Val Leu Thr Leu Phe Val Thr Ser Leu Ile Gly Ala Leu Ile Pro Glu Pro Glu Val Lys Ile Glu Val Leu Gln Lys Pro Phe Ile Cys His Arg Lys Thr Lys Gly Xaa Asp Leu Met Leu Val His Tyr Glu Gly Tyr Leu Glu Lys Asp Gly Ser Leu Phe His Ser Thr His Lys His Asn Asn Gly Gln Pro Ile Trp Phe Thr Leu Gly Ile Leu Glu Ala Leu Lys Gly Trp Asp Gln Gly Leu Lys Gly Met Cys Val Gly Glu Lys Arg Lys Leu Ile Ile Pro Pro Ala Leu Gly Tyr Gly 105 Lys Glu Gly Lys Gly Lys Ile Pro Pro Glu Ser Thr Leu Ile Phe Asn Ile Asp Leu Leu Glu Ile Arg Asn Gly Pro Arg Ser His Glu Ser Phe

Lys Ala Tyr Leu Lys Lys Glu Phe Glu Lys His Gly Ala Val Val Asn Glu Ser His His Asp Ala Leu Val Glu Asp Ile Phe Asp Lys Glu Asp 185

155

Glu Asp Xaa Tyr Gly Phe Ile Ser Ala Arg Glu Phe Thr Tyr Lys His 200

Gln Glu Met Asp Leu Asn Asp Asp Trp Lys Leu Ser Lys Asp Glu Val

150

Asp Glu Leu 210

<210> 1153 <211> 161 <212> PRT <213> Homo sapiens <220> <221> SITE

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<222> (123)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (129)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (145)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (146)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (157)
<223> Xaa equals any amino acid
<400> 1153
Met Thr Trp Ser Cys Leu Val Ala Met Ile Val Ser Gly Val Ile
Thr Ala Val Trp Ala Val Arg Ala Ala Pro Ile Trp Arg Ser Gln Val
Lys Gln Lys Met Arg Ile Gly Lys Gln Gly Asn Cys Arg Pro Pro Arg
Cys Ile Cys Ser Ala Leu Gly Leu Leu Ala Pro Trp Met Ala Val Val
Leu Ser Gln Leu Ser Val Arg Cys Val Val Ser Trp Val Gln Gly Lys
Pro Ser Ser Pro Arg Pro Arg Gly Ser Ala Ala Ser Pro Ala Pro Gly
Ala Thr Pro Pro Thr Pro Arg Lys Pro Val Ser Trp Leu Gly Tyr Arg
           100
Glu Asn His Arg Pro Lys Lys Pro Lys Ser Xaa Thr Arg Cys Leu Val
                           120
Xaa Gln Asn Trp Ser Leu Pro Pro Ile Ser Lys Asp Arg Thr Ala Gly
                       135
Xaa Xaa Asp Thr Asn Arg Thr Arg Arg Ser Gly Leu Xaa Leu Arg Leu
Gly
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<210> 1154 <211> 325

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<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (10)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (136)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (186)
<223> Xaa equals any amino acid
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<221> SITE
<222> (234)
<223> Xaa equals any amino acid
<400> 1154
Val Pro Pro Ala Val Cys Pro Ala Gly Xaa Phe Cys Gln Asn Gln Cys
Phe Thr Lys Arg Gln Tyr Pro Glu Thr Lys Ile Ile Lys Thr Asp Gly
Lys Gly Trp Gly Leu Val Ala Lys Arg Asp Ile Arg Lys Gly Glu Phe
Val Asn Glu Tyr Val Gly Glu Leu Ile Asp Glu Glu Glu Cys Met Ala
Arg Ile Lys His Ala His Glu Asn Asp Ile Thr His Phe Tyr Met Leu
Thr Ile Asp Lys Asp Arg Ile Ile Asp Ala Gly Pro Lys Gly Asn Tyr
Ser Arg Phe Met Asn His Ser Cys Gln Pro Asn Cys Glu Thr Leu Lys
Trp Thr Val Asn Gly Asp Thr Arg Val Gly Leu Phe Ala Val Cys Asp
                            120
Ile Pro Ala Gly Thr Glu Leu Xaa Phe Asn Tyr Asn Leu Asp Cys Leu
Gly Asn Glu Lys Thr Val Cys Arg Cys Gly Ala Ser Asn Cys Ser Gly
                                        155
                    150
Phe Leu Gly Asp Arg Pro Lys Thr Ser Thr Thr Leu Ser Ser Glu Glu
Lys Gly Lys Lys Thr Lys Lys Thr Xaa Arg Arg Arg Ala Lys Gly
Glu Gly Lys Arg Gln Ser Glu Asp Glu Cys Phe Arg Cys Gly Asp Gly
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195 200 205

Gly Gln Leu Val Leu Cys Asp Arg Lys Phe Cys Thr Lys Ala Tyr His 210 220

Leu Ser Cys Leu Gly Leu Gly Lys Arg Xaa Phe Gly Lys Trp Glu Cys 225 230 235 240

Pro Trp His His Cys Asp Val Cys Gly Lys Pro Ser Thr Ser Phe Cys 245 250 255

His Leu Cys Pro Asn Ser Phe Cys Lys Glu His Gln Asp Gly Thr Ala 260 265 270

Phe Ser Cys Thr Pro Asp Gly Arg Ser Tyr Cys Cys Glu His Asp Leu 275 280 285

Gly Ala Ala Ser Val Arg Ser Thr Lys Thr Glu Lys Pro Pro Pro Glu 290 295 300

Pro Gly Lys Pro Lys Gly Lys Arg Arg Arg Arg Gly Trp Arg Arg 305 310 315

Val Thr Glu Gly Lys 325

<210> 1155

<211> 40

<212> PRT

<213> Homo sapiens

<400> 1155

Met Val Ala Met Val Phe Leu Lys Ile Ser Val Leu Pro Leu Met Cys

1 10 15

Arg Gly Gln Thr Lys His Lys Val Leu Arg Asp His Ala Tyr Pro Arg 20 25 30

Val Ser Gln Lys Arg Gly His Ile 35 40

<210> 1156

<211> 61

<212> PRT

<213> Homo sapiens

<400> 1156

Met Gln Gly Lys Phe Met Lys Val Gln Val Tyr Arg Phe Leu Lys Tyr 1 5 10 . 15

Leu Leu Met Leu Leu Cys Met Phe Val Asn Arg Gly Met Ser Lys Asp 20 25 30

Ser Thr Lys Lys Pro Gly Gln Glu Lys Leu Lys Val Ser Leu Gly Ser

Ile Leu Asn Met Lys Ser Gln Arg Pro Leu Ser Trp Cys

50 55 60

<210> 1157

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1157

Met Leu Phe Val Phe Cys Cys Thr Val Phe Phe Val Cys Leu Phe Val 1 5 10 15

Tyr Leu Val Gly Phe Leu Glu Arg Glu Ile Trp Lys Arg Asp Ile His
20 25 30

Lys Ser Tyr Thr Pro Thr Phe Pro Phe Tyr His Asp Ile Glu Glu 35 40 45

Thr Ser Arg Ala Lys Asn Gly Val Lys Lys Gly Ser Met Ala Gly Thr 50 55 60

Ser Lys Glu Leu Arg Ala Val Ala Leu Lys Asn Tyr Phe Phe Tyr Tyr 65 70 75 80

Tyr Phe Glu Ser Met Glu Val Phe His Ser Leu Gly Lys Gly Gly Lys

85

90

95

Ser Ala Phe Ile Phe Ile Gln Ser Tyr Leu Ile Thr Ser Lys Thr His 100 105 110

Met Leu Glu Ile Ala Phe Ala Gly Ala Lys Tyr Ile As<br/>n Glu Gl<br/>n Glu 115 120 . 125

Tyr Ile His 130

<210> 1158

<211> 173

<212> PRT

<213> Homo sapiens

<400> 1158

Met Val Phe Leu Lys Phe Phe Cys Met Ser Phe Phe Cys His Leu Cys 1 5 10 15

Gln Gly Tyr Phe Asp Gly Pro Leu Tyr Pro Glu Met Ser Asn Gly Thr 20 25 30

Leu His His Tyr Phe Val Pro Asp Gly Asp Tyr Glu Glu Asn Asp Asp 35 40 45

Pro Glu Lys Cys Gln Leu Leu Phe Arg Val Ser Asp His Arg Arg Cys 50 55 60

Ser Gln Gly Glu Gly Ser Gln Val Gly Ser Leu Leu Ser Leu Thr Leu 65 70 75 80

Arg Glu Glu Phe Thr Val Leu Gly His Gln Val Glu Gly Cys Trp Ala

85 90 95

Arg Ala Gly Gly His Gln Gln Lys His Leu Leu Arg Pro Arg Gly 100 \$105

Arg Glu Leu Trp Gln Val Pro Ala Ala Gly Val Pro Pro Asp Arg Gly 115 120 125

Met Pro Thr Pro Thr Arg Thr Asn Pro Ser Leu Ser Trp Arg Ala Ser 130 135 140

Ser Ser Arg Ala Arg Asn Arg Thr Ala Gly Arg Arg Ala Gly Ser Thr 145 150 155 160

Arg Thr Phe Trp Glu Cys Trp Ser Thr Pro Gly Pro Cys 165 170

<210> 1159

<211> 48

<212> PRT

<213> Homo sapiens

<400> 1159

Met Met Leu Tyr Gln Asn Met Leu Leu Tyr Phe Arg Ile Ile Gly Val 1 5 10 15

Leu Ala Leu Asn Phe Ser Ile Ser Pro Ile Phe Phe His Gly Ser Leu 20 25 30

Gly Lys Leu Tyr Val Tyr Ser Ala Ala Lys Tyr Ser Leu Glu Leu Lys 35 40 45

<210> 1160

<211> 10

<212> PRT

<213> Homo sapiens

<400> 1160

Ile Tyr Gln His Phe Ser Leu Trp Leu Gly
1 5 10

<210> 1161

<211> 4

<212> PRT

<213> Homo sapiens

<400> 1161

Met Phe Lys Met

1

<210> 1162

<211> 201

<212> PRT

<213> Homo sapiens

<400> 1162

Met Lys Leu Leu Ile Leu Phe Leu Ser His Leu Leu Ser Leu Ala Phe 1 5 10 15

Gly Ile Leu Cys Leu Ser Val Thr Val Ile Leu Ser Leu Leu Ser 20 25 30

Phe Ser Lys Arg Gly Phe Ser Val Arg Ser Phe Gly Thr Gly Thr His  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Val Lys Leu Pro Gly Pro Ala Pro Asp Lys Pro Asn Val Tyr Asp Phe 50 55 60

Lys Thr Thr Tyr Asp Gln Met Tyr Asn Asp Leu Leu Arg Lys Asp Lys 65 70 75 80

Glu Leu Tyr Thr Gln Asn Gly Ile Leu His Met Leu Asp Arg Asn Lys 85 90 95

Arg Ile Lys Pro Arg Pro Glu Arg Phe Gln Asn Cys Lys Asp Leu Phe 100 105 110

Asp Leu Ile Leu Thr Cys Glu Glu Arg Val Tyr Asp Gln Val Val Glu 115 120 125

Asp Leu Asn Ser Arg Glu Gln Glu Thr Cys Gln Pro Val His Val Val . 130 135 140

Asn Val Asp Ile Gln Asp Asn His Glu Glu Ala Thr Leu Gly Ala Phe 145 150 155 160

Leu Ile Cys Glu Leu Cys Gln Cys Ile Gln His Thr Glu Asp Met Glu 165 . 170 175

Asn Glu Ile Asp Glu Leu Leu Gln Glu Phe Glu Glu Lys Ser Gly Arg 180 185 190

Thr Phe Leu His Thr Val Cys Phe Tyr 195 200

<210> 1163

<211> 392

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (251)

<223> Xaa equals any amino acid

<400> 1163

Met Ala Pro Trp Pro Pro Lys Gly Leu Val Pro Ala Val Leu Trp Gly
1 5 10 15

Leu	Ser	Leu	Phe 20	Leu	Asn	Leu	Pro	Gly 25	Pro	Ile	Trp	Leu	Gln 30	Pro	Ser
Pro	Pro	Pro 35	Gln	Ser	Ser	Pro	Pro 40	Pro	Gln	Pro	His	Pro 45	Cys	His	Thr
Cys	Arg 50	Gly	Leu	Val	Asp	Ser 55	Phe	Asn	Lys	Gly	Leu 60	Glu	Arg	Thr	Ile
Arg 65	Asp	Asn	Phe	Gly	Gly 70	Gly	Asn	Thr	Ala	Trp 75	Glu	Glu	Glu	Asn	Leu 80
Ser	Lys	Tyr	Lys	Asp 85	Ser	Glu	Thr	Arg	Leu 90	Val	Glu	Val	Leu	Glu 95	Gly
Val	Суѕ	Ser	Lys 100	Ser	Asp	Phe	Glu	Cys 105		Arg	Leu	Leu	Glu 110	Leu	Ser
Glu	Glu	Leu 115	Val	Glu	Ser	Trp	Trp 120	Phe	His	Lys	Gln	Gln 125	Glu	Ala	Pro
Asp	Leu 130	Phe	Gln	Trp	Leu	Cys 135	Ser	Asp	Ser	Leu	Lys 140	Leu	Cys	Cys	Pro
Ala 145	Gly	Thr	Phe	Gly	Pro 150	Ser	Cys	Leu	Pro	Cys 155	Pro	Gly	Gly	Thr	Glu 160
Arg	Pro	Cys	Gly	Gly 165	Tyr	Gly	Gln	Cys	Glu 170	Gly	Glu	Gly	Thr	Arg 175	Gly
Gly	Ser	Gly	His 180	Cys	Asp	Cys	Gln	Ala 185	Gly	Tyr	Gly	Gly	Glu 190	Ala	Cys
Gly	Gln	Cys 195	Gly	Leu	Gly	Tyr	Phe 200	Glu	Ala	Glu	Arg	Asn 205	Ala	Ser	His
Leu	Val 210	Cys	Ser	Ala	Cys	Phe 215	Gly	Pro	Суѕ	Ala	Arg 220	Cys	Ser	Gly	Pro
G1u 225	Glu	Ser	Asn	Cys	Leu 230	Gln	Cys	Lys	Lys	Gly 235	Trp	Ala	Leu	His	His 240
Leu	Lys	Cys	Val	Asp 245	Cys	Ala	Lys	Ala	Суs 250	Xaa	Gly	Суѕ	Met	Gly 255	Ala
Gly	Pro	Gly	Arg 260	Cys	Lys	Lys	Cys	Ser 265	Pro	Gly	Tyr	Gln	Gln 270	Val	Gly
Ser	Lys	Cys 275	Leu	Asp	Val	Asp	Glu 280	Cys	Glu	Thr	Glu	Val 285	Суѕ	Pro	Gly
Glu	Asn 290	Lys	Gln	Cys	Glu	Asn 295	Thr	Glu	Gly	Gly	Tyr 300	Arg	Cys	Ile	Cys
Ala 305	Glu	Gly	Tyr	Lys	Gln 310	Met	Glu	Gly	Ile	Cys 315	Val	Lys	Glu	Gln	11e 320
Pro	Glu	Ser	Ala	Gly 325	Phe	Phe	Ser	Glu	Met 330	Thr	Glu	Asp	Glu	Leu 335	Val
Val	Leu	Gln	Gln	Met	Phe	Phe	Gly	Ile	Ile	Ile	Cys	Ala	Leu	Ala	Thr

340 345 350

Leu Ala Ala Lys Gly Asp Leu Val Phe Thr Ala Ile Phe Ile Gly Ala 355 360 365

Val Ala Ala Met Thr Gly Tyr Trp Leu Ser Glu Arg Ser Asp Arg Val 370 375 380

Leu Glu Gly Phe Ile Lys Gly Arg 385 390

<210> 1164

<211> 63

<212> PRT

<213> Homo sapiens

<400> 1164

Met Thr Glu Asp Glu Leu Val Val Leu Gln Gln Met Phe Gly Ile 1 5 10 15

Ile Ile Cys Ala Leu Ala Thr Leu Ala Ala Lys Gly Asp Leu Val Phe \$20\$ \$25\$ \$30

Thr Ala Ile Phe Ile Gly Ala Val Ala Ala Met Thr Gly Tyr Trp Leu 35 40 45

Ser Glu Arg Ser Asp Arg Val Leu Glu Gly Phe Ile Lys Gly Arg
50 55 60

<210> 1165

<211> 69

<212> PRT

<213> Homo sapiens

<400> 1165

Met Ser Arg Lys Ser Leu Ala Phe Pro Ile Ile Cys Ser Tyr Leu Cys 1 5 10 15

Phe Leu Thr Val Ala Thr Cys Ser Ile Ala Cys Thr Thr Val Phe Phe 20 25 30

Ala Asn Leu Arg His Thr Arg Tyr Ile Cys Ile Glu Leu Ser Ala Leu 35 40 45

Glu Thr Ser Gly Val Ile Ser Pro Gln Ile Asn Asn Val Pro Glu Val 50 60

His Gly Lys Tyr Ser

<210> 1166

<211> 52

<212> PRT

<213> Homo sapiens

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<220>
<221> SITE
<222> (36)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (37)
<223> Xaa equals any amino acid
<400> 1166
Met Gln Arg Leu Gly Lys Ala Pro Gly Thr Trp Gln Ala Ile Ser Lys
                                     10
Cys Trp Leu Leu Leu Leu Ser Leu Pro Phe Ser Gln Ser Ile Ile
Ile Ser Leu Xaa Xaa Gly Thr Met Ser Tyr Leu Pro Leu Tyr Phe Pro
Gln Tyr Phe Pro
   50
<210> 1167
<211> 86
<212> PRT
<213> Homo sapiens
<400> 1167
Ser Leu Lys His Phe Trp Ser Gln Gly Phe Trp Ile Lys Asp Thr Gln
Cys Ala Thr Cys Arg Met Val Val Ala Arg Trp Glu Glu Arg Met Glu
             20
                                 25
Ser Tyr Cys Leu Met Ile Gln Cys Phe Arg Leu Gly Arg Trp Lys Val
Leu Glu Met Cys Asp Gly Tyr Gly Cys Ala Thr Met Gly Arg Tyr Leu
Val Leu Leu Asn Cys Ala His Leu Lys Met Val Lys Met Ile Asn Phe
Val Tyr Val Leu Lys Gln
                 85
<210> 1168
<211> 54
<212> PRT
<213> Homo sapiens
<400> 1168
Met Lys Thr His Leu Leu Met Phe Leu Leu Ser Cys Met Ala Arg Cys
Thr Gly Ile Val Pro Lys Arg Pro Gln Pro Ala Phe Pro Leu Arg Gly
```

20 25 30

Arg Arg Lys Asn Ser Phe Leu Phe Leu Leu Ser Phe Ser Ile Glu 35 40 45

Phe Leu Leu Cys Val Trp 50

<210> 1169

<211> 47

<212> PRT

<213> Homo sapiens

<400> 1169

Met Lys Thr His Leu Leu Met Phe Leu Leu Ser Cys Met Ala Arg Cys  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Thr Gly Ile Val Pro Lys Arg Pro Gln Pro Ala Phe Pro Leu Arg Gly

Lys Glu Lys Lys Leu Leu Phe Ile Phe Thr Phe Phe Gln His 35 40 45

<210> 1170

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1170

Met Thr Val Arg Arg Leu Ser Leu Leu Cys Arg Asp Leu Trp Ala Leu 1 5 10 15

Trp Leu Leu Lys Ala Gly Ala Val Arg Gly Ala Arg Ala Gly Pro 20 25 30

Arg Leu Pro Gly Arg Cys Cys Gly Ala Thr Cys Gly Asp Ala Gly Arg
35 40 45

Gly Trp Thr Phe Trp Ala Gln Pro Cys Pro Gln Lys Leu Leu Gly Gln 50 55 60

Lys Pro Gly Ala Gly Gly Cys Arg Gly Trp Val Leu Gly Trp Val Pro 65 70 75 80

Pro Arg Pro Glu Glu Pro Cys Ser Leu Ala Gly Lys Val Cys Thr Gly 85 90 95

Leu Ala Arg Trp Met Val 100

<210> 1171

<211> 53

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (41)

<223> Xaa equals any amino acid

<400> 1171

Met Cys Lys Ala Val Cys Lys His Arg Leu Arg Leu Phe Ala Val Ser 1 5 10 15

Ser Phe Ser Leu Gly Leu Gly Trp Val Cys Val Leu Val Leu Met Leu 20 25 30

Trp Pro Val Arg Leu Ser Leu Ala Xaa Arg Pro Val Gln Leu Gln Gln 40 45

Arg Arg Ser His Cys 50

<210> 1172

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1172

Met Lys Phe Leu Ile Phe Ala Phe Phe Gly Gly Val His Leu Leu Ser 1 5 10 15

Leu Cys Ser Gly Lys Ala Ile Cys Lys Asn Gly Ile Ser Lys Arg Thr 20 25 30

Phe Glu Glu Ile Lys Glu Glu Ile Ala Ser Cys Gly Asp Val Ala Lys 35 40 45

Ala Ile Ile Asn Leu Ala Val Tyr Gly Lys Ala Gln Asn Arg Ser Tyr 50 55 60

Glu Arg Leu Ala Leu Leu Val Asp Thr Val Gly Pro Arg Leu Ser Gly 65 70 75 80

Ser Lys Asn Leu Glu Lys Ala Ile Gln Ile Met Tyr Gln Asn Leu Gln 85 90 95

Gln Asp Gly Leu Glu Lys Val His Leu Glu Pro Val Arg Ile Pro His 100 105 110

Trp Glu Arg Gly Glu Ser Ala Val Met Leu Glu Pro Arg Ile His
115 120 125

Lys Ile Ala Ile Leu Gly Leu Gly Ser Ser Ile Gly Thr Pro Pro Glu 130 140

Gly Ile Thr Ala Glu Val Leu Val Val Thr Ser Phe Asp Glu Leu Gln 145 150 155 160

Arg Arg Ala Ser Glu Ala Arg Gly Lys Ile Val Val Tyr Asn Gln Pro 165 170 175

Tyr Ile Asn Tyr Ser Arg Thr Val Gln Tyr Arg Thr Gln Gly Ala Val 180 185 190

Glu Ala Ala Lys Val Gly Ala Leu Ala Ser Leu Ile Arg Ser Val Ala 200 Ser Phe Ser Ile Tyr Ser Pro His Thr Gly Ile Gln Glu Tyr Gln Asp 215 Gly Val Pro Lys Ile Pro Thr Ala Cys Ile Thr Val Glu Asp Ala Glu Met Met Ser Arg Met Ala Ser His Gly Ile Lys Ile Val Ile Gln Leu Lys Met Gly Ala Lys Thr Tyr Pro Asp Thr Asp Ser Phe Asn Thr Val Ala Glu Ile Thr Gly Ser Lys Tyr Pro Glu Gln Val Val Leu Val Ser 280 Gly His Leu Asp Ser Trp Asp Val Gly Gln Gly Ala Met Asp Asp Gly 295 Gly Gly Ala Phe Ile Ser Trp Glu Ala Leu Ser Leu Ile Lys Asp Leu 315 Gly Leu Arg Pro Lys Arg Thr Leu Arg Leu Val Leu Trp Thr Ala Glu Glu Gln Gly Gly Val Gly Ala Phe Gln Tyr Tyr Gln Leu His Lys Val 345 Asn Ile Ser Asn Tyr Ser Leu Val Met Glu Ser Asp Ala Gly Thr Phe Leu Pro Thr Gly Leu Gln Phe Thr Gly Ser Glu Lys Ala Arg Ala Ile Met Glu Glu Val Met Ser Leu Leu Gln Pro Leu Asn Ile Thr Gln Val 390 Leu Ser His Gly Glu Gly Thr Asp Ile Asn Phe Trp Ile Gln Ala Gly 405

Val Pro Gly Ala Ser Leu Leu Asp Asp Leu Tyr Lys Tyr Phe Phe Phe 420 425 430

His His Ser His Gly Asp Thr Met Thr Val Met Asp Pro Lys Gln Met

Asn Val Ala Ala Ala Val Trp Ala Val Val Ser Tyr Val Val Ala Asp 450 455 460

Met Glu Glu Met Leu Pro Arg Ser 465 470

<210> 1173

<211> 178

<212> PRT

<213> Homo sapiens

<400> 1173 Ser Ile Tyr Ser Pro His Thr Gly Ile Gln Glu Tyr Gln Asp Gly Val Pro Lys Ile Pro Thr Ala Cys Ile Thr Val Glu Asp Ala Glu Met Met Ser Arg Met Ala Ser His Gly Ile Lys Ile Val Ile Gln Leu Lys Met Gly Ala Lys Thr Tyr Pro Asp Thr Asp Ser Phe Asn Thr Val Ala Glu Ile Thr Gly Ser Lys Tyr Pro Glu Gln Val Val Leu Val Ser Gly His Leu Asp Ser Trp Asp Val Gly Gln Gly Ala Met Asp Asp Gly Gly Gly Ala Phe Ile Ser Trp Glu Ala Leu Ser Leu Ile Lys Asp Leu Gly Leu Arg Pro Lys Arg Thr Leu Arg Leu Val Leu Trp Thr Ala Glu Glu Gln 120 Gly Gly Val Gly Ala Phe Gln Tyr Tyr Gln Leu His Lys Val Asn Ile 135 Ser Asn Tyr Ser Leu Val Met Glu Ser Asp Ala Gly Thr Phe Leu Pro Thr Gly Leu Gln Phe Thr Gly Ser Glu Lys Ala Arg Ala Ser Trp Arg Arg Leu

<210> 1174

<211> 199 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (142) <223> Xaa equals any amino acid <400> 1174 Met Lys Leu Gly Cys Val Leu Met Ala Trp Ala Leu Tyr Leu Ser Leu Gly Val Leu Trp Val Ala Gln Met Leu Leu Ala Ala Ser Phe Glu Thr Leu Gln Cys Glu Gly Pro Val Cys Thr Glu Glu Ser Ser Cys His Thr Glu Asp Asp Leu Thr Asp Ala Arg Glu Ala Gly Phe Gln Val Lys Ala

50 55 60

Tyr Thr Phe Ser Glu Pro Phe His Leu Ile Val Ser Tyr Asp Trp Leu 65 70 75 80

Ile Leu Gln Gly Pro Ala Lys Pro Val Phe Glu Gly Asp Leu Leu Val 85 90 95

Leu Arg Cys Gln Ala Trp Gln Asp Trp Pro Leu Thr Gln Val Thr Phe 100 105 110

Tyr Arg Asp Gly Ser Ala Leu Gly Pro Pro Gly Pro Asn Arg Glu Phe 115 120 125

Ser Ile Thr Val Val Gln Lys Ala Asp Ser Gly His Tyr Xaa Cys Ser 130 135 140

Gly Ile Phe Gln Ser Pro Gly Pro Gly Ile Pro Glu Thr Ala Ser Val 145  $\,$  150  $\,$  155  $\,$  160

Val Ala Ile Thr Val Gln Glu Leu Phe Pro Ala Pro Ile Leu Leu Leu 165 170 175

Gln Gly Trp Lys Asp Ser Ala Lys Gln Gly Gly Ser Pro Gln Asn Ser 180 \$185

Arg Ser Pro Gln Leu Gln Lys 195

<210> 1175

<211> 2

<212> PRT

<213> Homo sapiens

<400> 1175 Ser Trp 1

<210> 1176

<211> 32

<212> PRT

<213> Homo sapiens

<400> 1176

Cys Leu Glu Thr Phe Trp Ser Leu Tyr Leu Gly Gly Trp Gly Met Val 1 5 10 15

Gly Cys Val Cys Tyr Trp His Pro Val Asn Arg Ser Gln Gly Cys Arg 20 25 30

<210> 1177

<211> 283

<212> PRT

<213> Homo sapiens

<400> 1177

Met Tyr Leu Ser Ala Leu Gln Ser Leu Ile Pro Ser Leu Phe Ala Leu 1 5 10 15

Val Leu Gln Asn Ala Pro Phe Ser Ser Lys Ala Lys Leu His Gly Glu 20 25 30

Val Pro Gln Ile Glu Val Thr Arg Phe Pro Arg Pro Met Ser Pro Leu 35 40 45

Gln Asp Val Ser Thr Ile Ile Gly Ser Arg Glu Gln Leu Ala Val Leu 50 55 60

Leu Gln Leu Tyr Asp Tyr Gln Leu Glu Gln Glu Gly Thr Thr Gly Trp 65 70 75 80

Glu Ser Leu Leu Trp Val Val Asn Gln Leu Leu Pro Gln Leu Ile Glu 85 90 95

Ile Val Gly Lys Ile Asn Val Thr Ser Thr Ala Cys Val His Glu Phe  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Ser Arg Phe Phe Trp Arg Leu Cys Arg Thr Phe Gly Lys Ile Phe Thr 115 120 125

Asn Thr Lys Val Lys Pro Gln Phe Gln Glu Ile Leu Arg Leu Ser Glu 130 135 140

Glu Asn Ile Asp Ser Ser Ala Gly Asn Gly Val Leu Thr Lys Ala Thr 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Val Pro Ile Tyr Ala Thr Gly Val Leu Thr Cys Tyr Ile Gln Glu Glu 165 170 175

Asp Arg Lys Leu Leu Val Gly Phe Leu Glu Asp Val Met Thr Leu Leu 180 185 190

Ser Leu Ser His Ala Pro Leu Asp Ser Leu Lys Ala Ser Phe Val Glu 195 200 205

Leu Gly Ala Asn Pro Ala Tyr His Glu Leu Leu Leu Thr Val Leu Trp 210 215 220

Tyr Gly Val Val His Thr Ser Ala Leu Val Arg Cys Thr Ala Ala Arg 225 230 235 240

Met Phe Glu Val Cys Gln His Met Pro Leu Leu Val Ser Ile Ile Met 245 250 255

Ile Phe Phe Leu Arg Arg Arg Glu Phe Phe Leu Ile Lys Arg 260 265 270

Leu Cys Ile Ser Lys Lys Lys Lys Lys Lys Lys 275 280

<210> 1178

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<211> 286
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (204)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (224)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (228)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (264)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (271)
<223> Xaa equals any amino acid
<400> 1178
Met Tyr Leu Ser Ala Leu Gln Ser Leu Ile Pro Ser Leu Phe Ala Leu
Val Leu Gln Asn Ala Pro Phe Ser Ser Lys Ala Lys Leu His Gly Glu
Val Pro Gln Ile Glu Val Thr Arg Phe Pro Arg Pro Met Ser Pro Leu
Gln Asp Val Ser Thr Ile Ile Gly Ser Arg Glu Gln Leu Ala Val Leu
Leu Gln Leu Tyr Asp Tyr Gln Leu Glu Gln Glu Gly Thr Thr Gly Trp
Glu Ser Leu Leu Trp Val Val Asn Gln Leu Leu Pro Gln Leu Ile Glu
                                     90
Ile Val Gly Lys Ile Asn Val Thr Ser Thr Ala Cys Val His Glu Phe
Ser Arg Phe Phe Trp Arg Leu Cys Arg Thr Phe Gly Lys Ile Phe Thr
                           120
Asn Thr Lys Val Lys Pro Gln Phe Gln Glu Ile Leu Arg Leu Ser Glu
                        135
Glu Asn Ile Asp Ser Ser Ala Gly Asn Gly Val Leu Thr Lys Ala Thr
Val Pro Ile Tyr Ala Thr Gly Val Leu Thr Cys Tyr Ile Gln Glu Glu
```

165 170 175

Asp Arg Lys Leu Leu Val Gly Phe Leu Glu Asp Val Met Thr Leu Leu 180 185 190

Ser Leu Ser His Ala Pro Leu Asp Ser Leu Lys Xaa Ser Phe Val Glu 195 200 205

Leu Gly Ala Asn Gln Ala Tyr His Glu Leu Leu Leu Thr Val Leu Xaa 210 215 220

Tyr Gly Val Xaa His Thr Ser Ala Leu Val Arg Cys Thr Ala Ala Arg 225 230 235 240

Met Phe Glu Leu Val Lys Gly Val Asn Glu Thr Leu Val Ala Gln
245 250 255

Arg Val Val Pro Ala Leu His Xaa Leu Ser Pro Val Asp Pro Xaa Asn 260 265 270

Leu Cys Gln Asp Cys His Asn Phe Gln Pro Leu Gly Leu Phe 275 280 285

<210> 1179

<211> 45

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (43)

<223> Xaa equals any amino acid

<400> 1179

Met Gln Ala Pro Leu Gln Asp Cys Gly Arg Ser Val Ser Leu Arg Leu 1 5 10 15

Ala Cys Val Leu Ala Pro Leu Thr Thr Ser Ser Arg Gly Cys His Leu 20 25 30

Gln Leu Pro Gln Asp Lys Gly Lys Ala Arg Xaa Asp Ser 35 40 45

<210> 1180

<211> 305

<212> PRT

<213> Homo sapiens

<400> 1180

Met Gly Ile Leu Leu Gly Leu Leu Leu Gly His Leu Thr Val Asp 1 5 10 15

Thr Tyr Gly Arg Pro Ile Leu Glu Val Pro Glu Ser Val Thr Gly Pro
20 25 30

Trp Lys Gly Asp Val Asn Leu Pro Cys Thr Tyr Asp Pro Leu Gln Gly 35 40 45

Tyr Thr Gln Val Leu Val Lys Trp Leu Val Gln Arg Gly Ser Asp Pro 50 55 60

Val Thr Ile Phe Leu Arg Asp Ser Ser Gly Asp His Ile Gln Gln Ala 65 70 75 80

Lys Tyr Gln Gly Arg Leu His Val Ser His Lys Val Pro Gly Asp Val 85 90 95

Ser Leu Gln Leu Ser Thr Leu Glu Met Asp Asp Arg Ser His Tyr Thr 100 105 110

Cys Glu Val Thr Trp Gln Thr Pro Asp Gly Asn Gln Val Val Arg Asp 115 120 125

Lys Ile Thr Glu Leu Arg Val Gln Lys His Ser Ser Lys Leu Leu Lys 130 135 140

Thr Lys Thr Glu Ala Pro Thr Thr Met Thr Tyr Pro Leu Lys Ala Thr 145 150 155 160

Ser Thr Val Lys Gln Ser Trp Asp Trp Thr Thr Asp Met Asp Gly Tyr 165 170 175

Leu Gly Glu Thr Ser Ala Gly Pro Gly Lys Ser Leu Pro Val Phe Ala 180 185 190

Ile Ile Leu Ile Ile Ser Leu Cys Cys Met Val Val Phe Thr Met Ala 195 200 205

Tyr Ile Met Leu Cys Arg Lys Thr Ser Gln Gln Glu His Val Tyr Glu 210 215 220

Ala Ala Arg Ala His Ala Arg Glu Ala Asn Asp Ser Gly Glu Thr Met 225 230 235 240

Arg Val Ala Ile Phe Ala Ser Gly Cys Ser Ser Asp Glu Pro Thr Ser 245 250 255

Gln Asn Leu Gly Asn Asn Tyr Ser Asp Glu Pro Cys Ile Gly Gln Glu 260 265 270

Tyr Gln Ile Ile Ala Gln Ile Asn Gly Asn Tyr Ala Arg Leu Leu Asp 275 280 285

Thr Val Pro Leu Asp Tyr Glu Phe Leu Ala Thr Glu Gly Lys Ser Val 290 295 300

Cys 305

<210> 1181

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1181

Met Tyr Arg Ala Ile Asp Ser Phe Pro Arg Trp Arg Ser Tyr Phe Tyr

1 5 10 15

Phe Ile Thr Leu Ile Phe Phe Leu Ala Trp Leu Val Lys Asn Val Phe 20 25 30

Ile Ala Val Ile Ile Glu Thr Phe Ala Glu Ile Arg Val Gln Phe Gln 35 40 45

Gln Met Trp Gly Ser Arg Ser Ser Thr Thr Ser Thr Ala Thr Thr Gln 50 60

Met Phe His Glu Asp Ala Ala Gly Gly Trp Gln Leu Val Ala Val Gly 65 70 75 80

Cys Gln Gln Ala Pro Gly Thr Arg Pro Ser Leu Pro Pro Gly Ala Val 85 90 95

Gln

<210> 1182

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1182

Met Lys Phe Val Pro Cys Leu Leu Leu Val Thr Leu Ser Cys Leu Gly
1 5 10 15

Thr. Leu Gly Gln Ala Pro Arg Gln Lys Gln Gly Ser Thr Gly Glu Glu
20 25 30

Phe Hi's Phe Gln Thr Gly Gly Arg Asp Ser Cys Thr Met Arg Pro Ser 35 40 45

Ser Leu Gly Gln Gly Ala Gly Glu Val Trp Leu Arg Val Arg Leu Pro 50 60

Gln His Arg Pro Asp Leu Leu Val

<210> 1183

<211> 219

<212> PRT

<213> Homo sapiens

<400> 1183

Met Glu Met Ala Ser Lys Met Lys Asp Thr Gly Phe Ile Val Phe Ala 1 5 10 15

Val Leu Leu Val Ser Cys Leu Ile Leu Ile Phe Val Ile Ala Pro 20 25 30

Arg Tyr Gly Gln Arg Asn Ile Leu Ile Tyr Ile Ile Ile Cys Ser Val 35 40 45

Ile Gly Ala Phe Ser Val Ala Ala Val Lys Gly Leu Gly Ile Thr Ile

55 50 60 Lys Asn Phe Phe Gln Gly Leu Pro Val Val Arg His Pro Leu Pro Tyr 70 75 Ile Leu Ser Leu Ile Leu Ala Leu Ser Leu Ser Thr Gln Val Asn Phe 90 Leu Asn Arg Ala Leu Asp Ile Phe Asn Thr Ser Leu Val Phe Pro Ile Tyr Tyr Val Phe Phe Thr Thr Val Val Val Thr Ser Ser Ile Ile Leu 120 Phe Lys Glu Trp Tyr Ser Met Ser Ala Val Asp Ile Ala Gly Thr Leu Ser Gly Phe Val Thr Ile Ile Leu Gly Val Phe Met Leu His Ala Phe 150 155 Lys Asp Leu Asp Ile Ser Cys Ala Ser Leu Pro His Met His Lys Asn 170 Pro Pro Pro Ser Pro Ala Pro Glu Pro Thr Val Ile Arg Leu Glu Asp Lys Asn Val Leu Val Asp Asn Ile Glu Leu Ala Ser Thr Ser Ser Pro 200 Glu Glu Lys Pro Lys Val Phe Ile Ile His Ser 210 215 <210> 1184 <211> 219 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (104) <223> Xaa equals any amino acid <220> <221> SITE <222> (197) <223> Xaa equals any amino acid

Ile Gly Ala Phe Ser Val Ala Ala Val Lys Gly Leu Gly Ile Thr Ile
50 55 60

Lys Asn Phe Phe Gln Gly Leu Pro Val Val Arg His Pro Leu Pro Tyr 65 70 75 80

Ile Leu Ser Leu Ile Leu Ala Leu Ser Leu Ser Thr Gln Val Asn Phe 85 90 95

Leu Asn Arg Ala Leu Asp Ile Xaa Asn Thr Ser Leu Val Phe Pro Ile 100 105 110

Tyr Tyr Val Phe Phe Thr Thr Val Val Thr Ser Ser Ile Ile Leu 115 120 125

Phe Lys Glu Trp Tyr Ser Met Ser Ala Val Asp Ile Ala Gly Thr Leu 130 135 140

Ser Gly Phe Val Thr Ile Ile Leu Gly Val Phe Met Leu His Ala Phe 145 150 155 160

Lys Asp Leu Asp Ile Ser Cys Ala Ser Leu Pro His Met His Lys Asn 165 170 175

Pro Pro Pro Ser Pro Ala Pro Glu Pro Thr Val Ile Arg Leu Glu Asp 180 185 190

Lys Asn Val Leu Xaa Asp Asn Ile Glu Leu Ala Ser Thr Ser Ser Pro 195 200 205

Glu Glu Lys Pro Lys Val Phe Ile Ile His Ser 210 215

<210> 1185

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1185

Met Gly Leu Trp Leu Gly Met Leu Ala Cys Val Phe Leu Ala Thr Ala 1 5 10 15

Ala Phe Val Ala Tyr Thr Ala Arg Leu Asp Trp Lys Leu Ala Ala Glu 20 25 30

Glu Ala Lys Lys His Ser Gly Arg Gln Gln Gln Arg Ala Glu Ser 35 40 45

Thr Ala Thr Arg Pro Gly Pro Glu Lys Ala Val Leu Ser Ser Val Ala 50 55 60

Thr Gly Ser Ser Pro Gly Ile Thr Leu Thr Thr Tyr Ser Arg Ser Glu 65 70 75 80

Cys His Val Asp Phe Phe Arg Thr Pro Glu Glu Ala His Ala Leu Ser 85 90 95

Ala Pro Thr Ser Arg Leu Ser Val Lys Gln Leu Val Ile Arg Arg Gly
100 105 110

Ala Ala Leu Gly Ala Ala Ser Ala His

115 120

<210> 1186

<211> 58

<212> PRT

<213> Homo sapiens

<400> 1186

Met Val Ile Ser Ile Phe Phe Ser Leu Pro Phe Ser Thr Ser Ala Tyr
1 5 10 15

Thr Leu Ile Ala Pro Asn Ile Asn Arg Arg Asn Glu Ile Gln Arg Ile 20 25 30

Ala Asp Arg Ser Trp Pro Thr Trp Arg Ser Gly Arg Ser Arg Thr Glu 35 40

Leu Asn Arg Phe Thr Trp Cys Pro Asp Gly
50 55

<210> 1187

<211> 171

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (151)

<223> Xaa equals any amino acid

<400> 1187

Met Tyr Ser Leu His Ser Trp Val Gly Leu Ile Ala Val Ile Cys Tyr 1 5 10 15

Leu Leu Gln Leu Leu Ser Gly Phe Ser Val Phe Leu Leu Pro Trp Ala
20 25 30

Pro Leu Ser Leu Arg Ala Phe Leu Met Pro Ile His Val Tyr Ser Gly  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ile Val Ile Phe Gly Thr Val Ile Ala Thr Ala Leu Met Gly Leu Thr 50 60

Glu Lys Leu Ile Phe Ser Leu Arg Asp Pro Ala Tyr Ser Thr Phe Pro 65 70 75 80

Pro Glu Gly Val Phe Val Asn Thr Leu Gly Leu Leu Ile Leu Val Phe
85 90 95

Gly Ala Leu Ile Phe Trp Ile Val Thr Arg Pro Gln Trp Lys Arg Pro 100 105 110

Lys Glu Pro Asn Ser Thr Ile Leu His Pro Asn Gly Gly Thr Glu Gln
115 120 125

Gly Ala Arg Gly Ser Met Pro Ala Tyr Ser Gly Asn Asn Met Asp Lys 130 135 140

Ala Leu Asp Glu Ala Gly Gln Arg Ser Thr Met 165 170

<210> 1188

<211> 509

<212> PRT

<213> Homo sapiens

<400> 1188

Met Thr Trp Arg Met Gly Pro Arg Phe Thr Met Leu Leu Ala Met Trp 1 5 10 15

Leu Val Cys Gly Ser Glu Pro His Pro His Ala Thr Ile Arg Gly Ser 20 25 30

His Gly Gly Arg Lys Val Pro Leu Val Ser Pro Asp Ser Ser Arg Pro
35 40 45

Ala Arg Phe Leu Arg His Thr Gly Arg Ser Arg Gly Ile Glu Arg Ser 50 55 60

Thr Leu Glu Glu Pro Asn Leu Gln Pro Leu Gln Arg Arg Ser Val
65 70 75 80

Pro Val Leu Arg Leu Ala Arg Pro Thr Glu Pro Pro Ala Arg Ser Asp 85 90 95

Ile Asn Gly Ala Ala Val Arg Pro Glu Gln Arg Pro Ala Ala Arg Gly
100 105 110

Ser Pro Arg Glu Met Ile Arg Asp Glu Gly Ser Ser Ala Arg Ser Arg 115 120 125

Met Leu Arg Phe Pro Ser Gly Ser Ser Ser Pro Asn Ile Leu Ala Ser 130 135 140

Phe Ala Gly Lys Asn Arg Val Trp Val Ile Ser Ala Pro His Ala Ser 145 150 155 160

Glu Gly Tyr Tyr Arg Leu Met Met Ser Leu Leu Lys Asp Asp Val Tyr 165 170 175

Cys Glu Leu Ala Glu Arg His Ile Gln Gln Ile Val Leu Phe His Gln 180 185 190

Ala Gly Glu Glu Gly Gly Lys Val Arg Arg Ile Thr Ser Glu Gly Gln 195 200 205

Ile Leu Glu Gln Pro Leu Asp Pro Ser Leu Ile Pro Lys Leu Met Ser 210 215 220

Phe Leu Lys Leu Glu Lys Gly Lys Phe Gly Met Val Leu Leu Lys Lys 225 230 235 240

Thr Leu Gln Val Glu Glu Arg Tyr Pro Tyr Pro Val Arg Leu Glu Ala

245 250 255

Met Tyr Glu Val Ile Asp Gln Gly Pro Ile Arg Arg Ile Glu Lys Ile 260 265 270

Arg Gln Lys Gly Phe Val Gln Lys Cys Lys Ala Ser Gly Val Glu Gly 275 280 285

Gln Val Val Ala Glu Gly Asn Asp Gly Gly Gly Gly Ala Gly Arg Pro 290 295 300

Ser Leu Gly Ser Glu Lys Lys Glu Asp Pro Arg Arg Ala Gln Val 305 310 315 320

Pro Pro Thr Arg Glu Ser Arg Val Lys Val Leu Arg Lys Leu Ala Ala 325 330 335

Thr Ala Pro Ala Phe Pro Gln Pro Pro Ser Thr Pro Arg Ala Thr Thr 340 345 350

Leu Pro Pro Ala Pro Ala Thr Thr Val Thr Arg Ser Thr Ser Arg Ala 355  $\phantom{0}360$   $\phantom{0}365$ 

Val Thr Val Ala Ala Arg Pro Met Thr Thr Thr Ala Phe Pro Thr Thr 370 375 380

Gln Arg Pro Trp Thr Pro Ser Pro Ser His Arg Pro Pro Thr Thr Thr 385 390 395 400

Glu Val Ile Thr Ala Arg Arg Pro Ser Val Ser Glu Asn Leu Tyr Pro 405 410 415

Pro Ser Arg Lys Asp Gln His Arg Glu Arg Pro Gln Thr Thr Arg Arg 420 425 430

Pro Ser Lys Ala Thr Ser Leu Glu Ser Phe Thr Asn Ala Pro Pro Thr 435 440 445

Thr Ile Ser Glu Pro Ser Thr Arg Ala Ala Gly Pro Gly Arg Phe Arg
450 455 460

Asp Asn Arg Met Asp Arg Glu His Gly His Arg Asp Pro Asn Val 465 470 475 480

Val Pro Gly Pro Pro Lys Pro Ala Lys Glu Lys Pro Pro Lys Lys Lys 485 490 495

Ala Gln Asp Lys Ile Leu Ser Asn Glu Tyr Glu Glu Val 500 505

<210> 1189

<211> 554

<212> PRT

<213> Homo sapiens

<400> 1189

Met Gly Pro Arg Phe Thr Met Leu Leu Ala Met Trp Leu Val Cys Gly
1 5 10 15

Ser	Glu	Pro	His 20	Pro	His	Ala	Thr	Ile 25	Arg	Gly	Ser	His	Gly 30	Gly	Arg
Lys	Val	Pro 35	Leu	Val	Ser	Pro	Asp 40	Ser	Ser	Arg	Pro	Ala 45	Arg	Phe	Let
Arg	His 50	Thr	Gly	Arg	Ser	Arg 55	Gly	Ile	Glu	Arg	Ser 60	Thr	Leu	Glu	Glu
Pro 65	Asn	Leu	Gln	Pro	Leu 70	Gln	Arg	Arg	Arg	Ser 75	Val	Pro	Val	Leu	Arg 80
Leu	Ala	Arg	Pro	Thr 85	Glu	Pro	Pro	Ala	Arg 90	Ser	Asp	Ile	Asn	Gly 95	Ala
Ala	Val	Arg	Pro 100	Glu	Gln	Arg	Pro	Ala 105	Ala	Arg	Gly	Ser	Pro 110	Arg	Glu
Met	Ile	Arg 115	Asp	Glu	Gly	Ser	Ser 120	Ala	Arg	Ser	Arg	Met 125	Leu	Arg	Phe
Pro	Ser 130	Gly	Ser	Ser	Ser	Pro 135	Asn	Ile	Leu	Ala	Ser 140	Phe	Ala	Gly	Lys
Asn 145	Arg	Val	Trp	Val	Ile 150	Ser	Ala	Pro	His	Ala 155	Ser	Glu	Gly	Tyr	Тут 160
Arg	Leu	Met	Met	Ser 165	Leu	Leu	Lys	Asp	Asp 170	Val	Tyr	Cys	Glu	Leu 175	Ala
Glu	Arg	His	Ile 180	Gln	Gln	Ile	Val	Leu 185	Phe	His	Gln	Ala	Gly 190	Glu	Glu
Gly	Gly	Lys 195	Val	Arg	Arg	Ile	Thr 200	Ser	Glu	Gly	Gln	Ile 205	Leu	Glu	Glr
Pro	Leu 210	Asp	Pro	Ser	Leu	Ile 215	Pro	Lys	Leu	Met	Ser 220	Phe	Leu	Lys	Leu
Glu 225	Lys	Gly	Lys	Phe	Gly 230	Met	Val	Leu	Leu	Lys 235	Lys	Thr	Leu	Gln	Val 240
Glu	Glu	Arg	Tyr	Pro 245	Tyr	Pro	Val	Arg	Leu 250	Glu	Ala	Met	Tyr	G1u 255	Val
Ile	Asp	Gln	Gly 260	Pro	Ile	Arg	Arg	11e 265	Glu	Lys	Ile	Arg	Gln 270	Lys	Gly
Phe	Val	Gln 275	Lys	Cys	Lys	Ala	Ser 280	Gly	Val	Glu	Gly	Gln 285	Val	Val	Ala
Glu	Gly 290	Asn	Asp	Gly	Gly	Gly 295	Gly	Ala	Gly	Arg	Pro 300	Ser	Gln	Gly	Ser
Glu 305	Lys	Lys	Lys	Glu	Asp 310	Pro	Arg	Arg	Ala	Gln 315	Val	Pro	Pro	Thr	Arg 320
Glu	Ser	Arg	Val	Lys 325	Val	Leu	Arg	Lys	Leu 330	Ala	Ala	Thr	Ala	Pro 335	Ala
Phe	Pro	Gln	Pro	Pro	Ser	Thr	Pro	Arg	Ala	Thr	Thr	Leu	Thr	Pro	Ala

340 345 350

Pro Ala Thr Thr Val Thr Arg Ser Thr Ser Arg Ala Gly Asn Arg Cys 355 360 365

Cys Lys Thr Tyr Asp His His Trp Leu Ser His His Ala Glu Ala Leu 370 375 380

Asp Pro Leu Thr Leu Pro Thr Gly Pro Leu Gln Pro Leu Arg Val Ile 385 390 395 400

Thr Ala Arg Arg Pro Ser Val Ser Arg Glu Ser Leu Pro Ser Ile Pro 405 410 415

Gly Arg Ile Ser Thr Gly Arg Gly His Arg Gln Pro Gly Gly Pro Ala 420 425 430

Arg Pro Thr Ser Leu Glu Ser Phe Thr Asn Ala Pro Pro Thr Thr Ile
435 440 445

Ser Glu Pro Ser Thr Arg Ala Ala Gly Pro Gly Arg Phe Arg Asp Asn 450 455 460

Arg Met Asp Arg Arg Glu His Gly His Arg Asp Pro Asn Val Val Pro 465 470 475 480

Gly Pro Pro Lys Pro Ala Lys Glu Lys Pro Pro Lys Lys Lys Ala Gln 485 490 495

Asp Lys Ile Leu Ser Asn Glu Tyr Glu Glu Lys Tyr Asp Leu Ser Arg 500 505 510

Pro Thr Ala Ser Gln Leu Glu Asp Glu Leu Gln Val Gly Asn Val Pro 515 520 525

Leu Lys Lys Ala Lys Glu Ser Lys Lys His Glu Lys Leu Glu Lys Pro 530 540

Glu Lys Glu Lys Lys Lys Lys Lys Lys Lys 545

<210> 1190

<211> 23

<212> PRT

<213> Homo sapiens

<400> 1190

Met Leu Ala Leu Leu Gly Leu Leu Ala Gly Thr Glu His Pro Pro Gly 1 5 10 15

Pro Gln Gly Pro Gly Pro Ser

<210> 1191

<211> 247

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (166) <223> Xaa equals any amino acid <400> 1191 Met His Leu Ala Arg Leu Val Gly Ser Cys Ser Leu Leu Leu Leu Leu Gly Ala Leu Ser Gly Trp Ala Ala Ser Asp Pro Ile Glu Lys Val Ile Glu Gly Ile Asn Arg Gly Leu Ser Asn Ala Glu Arg Glu Val Gly Lys Ala Leu Asp Gly Ile Asn Ser Gly Ile Thr His Ala Gly Arg Glu Val Glu Lys Val Phe Asn Gly Leu Ser Asn Met Gly Ser His Thr Gly Lys Glu Leu Asp Lys Gly Val Gln Gly Leu Asn His Gly Met Asp Lys Val Ala His Glu Ile Asn His Gly Ile Gly Gln Ala Gly Lys Glu Ala Glu Lys Leu Gly His Gly Val Asn Asn Ala Ala Gly Gln Ala Gly Lys 120 Glu Ala Asp Lys Ala Val Gln Gly Phe His Thr Gly Val His Gln Ala Gly Lys Glu Ala Glu Lys Leu Gly Gln Gly Val Asn His Ala Ala Asp 155 Gln Ala Gly Lys Glu Xaa Glu Lys Leu Gly Pro Ser Ala His His Ala Ala Gly Gln Ala Gly Lys Glu Leu Gln Asn Ala His Asn Gly Val Asn Gln Ala Ser Lys Glu Ala Asn Gln Leu Leu Asn Gly Asn His Gln Ser 200 Gly Ser Ser Ser His Gln Gly Gly Ala Thr Thr Thr Pro Leu Ala Ser

Gly Ala Ser Val Asn Thr Pro Phe Ile Asn Leu Pro Ala Leu Trp Arg

Ser Val Ala Asn Ile Met Pro 245

<210> 1192

<211> 42

<212> PRT

<213> Homo sapiens

235

<400> 1192 Met Phe Thr Leu Leu Ser Ser Phe Phe Leu Gln His Cys Leu Gln Asn Asn Leu Tyr Ala Ser Glu Arg Glu Gln Ile Phe Ser Asn Phe Leu Gln Leu Ser Ser Leu Lys Arg Arg Ile Cys <210> 1193 <211> 6 <212> PRT <213> Homo sapiens <400> 1193 Leu Leu Ser Ser Phe <210> 1194 <211> 25 <212> PRT <213> Homo sapiens <400> 1194 Met Val Asn Ile Phe Gly Phe Val Ser Cys Ile Val Phe Val Val Ala Val Gln Leu Cys Tyr Met Lys Gln Pro 20 <210> 1195 <211> 218 <212> PRT <213> Homo sapiens <400> 1195 Met His Phe Leu Phe Arg Phe Ile Val Phe Phe Tyr Leu Trp Gly Leu Phe Thr Ala Gln Arg Gln Lys Lys Glu Glu Ser Thr Glu Glu Val Lys Ile Glu Val Leu His Arg Pro Glu Asn Cys Ser Lys Thr Ser Lys Lys 40 Gly Asp Leu Leu Asn Ala His Tyr Asp Gly Tyr Leu Ala Lys Asp Gly Ser Lys Phe Tyr Cys Ser Arg Thr Gln Asn Glu Gly His Pro Lys Trp

Phe Val Leu Gly Val Gly Gln Val Ile Lys Gly Leu Asp Ile Ala Met

Thr Asp Met Cys Pro Gly Glu Lys Arg Lys Val Val Ile Pro Pro Ser 100 105 110

Phe Ala Tyr Gly Lys Glu Gly Tyr Ala Glu Gly Lys Ile Pro Pro Asp · 115 120 125

Ala Thr Leu Ile Phe Glu Ile Glu Leu Tyr Ala Val Thr Lys Gly Pro 130 135 140

Arg Ser Ile Glu Thr Phe Lys Gln Ile Asp Met Asp Asn Asp Arg Gln 145 150 155 160

Leu Ser Lys Ala Glu Ile Asn Leu Tyr Leu Gln Arg Glu Phe Glu Lys 165 170 175

Asp Glu Lys Pro Arg Asp Lys Ser Tyr Gln Asp Ala Val Leu Glu Asp 180 185 190

Ile Phe Lys Lys Asn Asp His Asp Gly Asp Gly Phe Ile Ser Pro Lys
195 200 205

Glu Tyr Asn Val Tyr Gln His Asp Glu Leu 210 215

<210> 1196

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1196

Met His Phe Leu Phe Arg Phe Ile Val Phe Phe Tyr Leu Trp Gly Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Phe Thr Ala Gln Arg Gln Lys Lys Glu Glu Ser Thr Glu Glu Val Lys
20 25 30

Ile Glu Val Leu His Arg Pro Glu Asn Cys Ser Lys Thr Ser Lys Lys  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Asp Leu Leu Lys Cys Pro Leu
50 55

<210> 1197

<211> 606

<212> PRT

<213> Homo sapiens

<400> 1197

Met Thr Val Val Gly Asn Pro Arg Ser Trp Ser Cys Gln Trp Leu Pro

1 5 10 15

Ile Leu Ile Leu Leu Gly Thr Gly His Gly Pro Gly Val Glu Gly

Val Thr His Tyr Lys Ala Gly Asp Pro Val Ile Leu Tyr Val Asn Lys 35 40

Val	Gly 50	Pro	Tyr	His	Asn	Pro 55	Gln	Glu	Thr	Tyr	His 60	Tyr	Tyr	Gln	Leu
Pro 65	Val	Суѕ	Cys	Pro	Glu 70	Lys	Ile	Arg	His	Lys 75	Ser	Leu	Ser	Leu	Gly 80
Glu	Val	Leu	Asp	Gly 85	Asp	Arg	Met	Ala	Glu 90	Ser	Leu	Tyr	Glu	Ile 95	Arg
Phe	Arg	Glu	Asn 100	Val	Glu	Lys	Arg	Ile 105	Leu	Cys	His	Met	Gln 110	Leu	Ser
Ser	Ala	Gln 115	Val	Glu	Gln	Leu	Arg 120	Gln	Ala	Ile	Glu	Glu 125	Leu	Tyr	Tyr
Phe	Glu 130	Phe	Val	Val	Asp	Asp 135	Leu	Pro	Ile	Arg	Gly 140	Phe	Val	Gly	Tyr
Met 145	Glu	Glu	Ser	Gly	Phe 150	Leu	Pro	His	Ser	His 155	Lys	Ile	Gly	Leu	Trp 160
Thr	His	Leu	Asp	Phe 165	His	Leu	Glu	Phe	His 170	Gly	Asp	Arg	Ile	Ile 175	Phe
Ala	Asn	Val	Ser 180	Val	Arg	Asp	Val	Lys 185	Pro	His	Ser	Leu	Asp 190	Gly	Leu
Arg	Pro	Asp 195	Glu	Phe	Leu	Gly	Leu 200	Thr	His	Thr	Tyr	Ser 205	Val	Arg	Trp
Ser	Glu 210	Thr	Ser	Val	Glu	Arg 215	Arg	Ser	Asp	Arg	Arg 220	Arg	Gly	Asp	Asp
Gly 225	Gly	Phe	Phe	Pro	Arg 230	Thr	Leu	Glu	Ile	His 235	Trp	Leu	Ser	Ile	Ile 240
Asn	Ser	Met	Val	Leu 245	Val	Phe	Leu	Leu	Val 250	Gly	Phe	Val	Ala	Val 255	Ile
Leu	Met	Arg	Val 260	Leu	Arg	Asn	Asp	Leu 265	Ala	Arg	Tyr	Asn	Leu 270	Asp	Glu
Glu	Thr	Thr 275	Ser	Ala	Gly	Ser	Gly 280	Asp	Asp	Phe	Asp	Gln 285	Gly	Asp	Asn
Gly	Trp 290	Lys	Ile	Ile	His	Thr 295	Asp	Val	Phe	Arg	Phe 300	Pro	Pro	Tyr	Arg
Gly 305	Leu	Leu	Cys	Ala	Val 310	Leu	Gly	Val	Gly	Ala 315	Gln	Phe	Leu	Ala	Leu 320
Gly	Thr	Gly	Ile	Ile 325	Val	Met	Ala	Leu	Leu 330	Gly	Met	Phe	Asn	Val 335	His
Arg	His	Gly	Ala 340	Ile	Asn	Ser	Ala	Ala 345	Ile	Leu	Leu	Tyr	Ala 350	Leu	Thr
Cys	Суѕ	Ile 355	Ser	Gly	Tyr	Val	Ser 360	Ser	His	Phe	Tyr	Arg 365	Gln	Ile	Gly

Gly Glu Arg Trp Val Trp Asn Ile Ile Leu Thr Thr Ser Leu Phe Ser 370 380

Val Pro Phe Phe Leu Thr Trp Ser Val Val Asn Ser Val His Trp Ala 385 390 395 400

Asn Gly Ser Thr Gln Ala Leu Pro Ala Thr Thr Ile Leu Leu Leu Leu 405 410 415

Thr Val Trp Leu Leu Val Gly Phe Pro Leu Thr Val Ile Gly Gly Ile 420 425 430

Phe Gly Lys Asn Asn Ala Ser Pro Phe Asp Ala Pro Cys Arg Thr Lys 435 440 445

Asn Ile Ala Arg Glu Ile Pro Pro Gln Pro Trp Tyr Lys Ser Thr Val 450 455 460

Ile His Met Thr Val Gly Gly Phe Leu Pro Phe Ser Ala Ile Ser Val 470 475 480

Glu Leu Tyr Tyr Ile Phe Ala Thr Val Trp Gly Arg Glu Gln Tyr Thr 485 490 495

Leu Tyr Gly Ile Leu Phe Phe Val Phe Ala Ile Leu Leu Ser Val Gly 500 505 510

Ala Cys Ile Ser Ile Ala Leu Thr Tyr Phe Gln Leu Ser Gly Glu Asp  $515 \hspace{1.5cm} 520 \hspace{1.5cm} 525$ 

Tyr Arg Trp Trp Trp Arg Ser Val Leu Ser Val Gly Ser Thr Gly Leu 530 535 540

Phe Ile Phe Leu Tyr Ser Val Phe Tyr Tyr Ala Arg Arg Ser Asn Met 545 550 560

Ser Gly Ala Val Gln Thr Val Glu Phe Phe Gly Tyr Ser Leu Leu Thr 565 570 575

Gly Tyr Val Phe Phe Leu Met Leu Gly Thr Ile Ser Phe Phe Ser Ser 580 585 590

Leu Lys Phe Ile Arg Tyr Ile Tyr Val Asn Leu Lys Met Asp 595 600 605

<210> 1198

<211> 305

<212> PRT

<213> Homo sapiens

<400> 1198

Met Ala Ala Gly Leu Ala Arg Leu Leu Leu Leu Gly Leu Ser Ala 1 5 10 15

Gly Gly Pro Ala Pro Ala Gly Ala Ala Lys Met Lys Val Val Glu Glu 20 25 30

Pro Asn Ala Phe Gly Val Asn Asn Pro Phe Leu Pro Gln Ala Ser Arg
35 40 45

Leu Gln Ala Lys Arg Asp Pro Ser Pro Val Ser Gly Pro Val His Leu Phe Arg Leu Ser Gly Lys Cys Phe Ser Leu Val Glu Ser Thr Tyr Lys Tyr Glu Phe Cys Pro Phe His Asn Val Thr Gln His Glu Gln Thr Phe Arg Trp Asn Ala Tyr Ser Gly Ile Leu Gly Ile Trp His Glu Trp Glu Ile Ala Asn Asn Thr Phe Thr Gly Met Trp Met Arg Asp Gly Asp Ala 120 Cys Arg Ser Arg Ser Arg Gln Ser Lys Val Glu Leu Ala Cys Gly Lys 135 Ser Asn Arg Leu Ala His Val Ser Glu Pro Ser Thr Cys Val Tyr Ala Leu Thr Phe Glu Thr Pro Leu Val Cys His Pro His Ala Leu Leu Val Tyr Pro Thr Leu Pro Glu Ala Leu Gln Arg Gln Trp Asp Gln Val Glu 185 Gln Asp Leu Ala Asp Glu Leu Ile Thr Pro Gln Gly His Glu Lys Leu 200 Leu Arg Thr Leu Phe Glu Asp Ala Gly Tyr Leu Lys Thr Pro Glu Glu Asn Glu Pro Thr Gln Leu Glu Gly Gly Pro Asp Ser Leu Gly Phe Glu Thr Leu Glu Asn Cys Arg Lys Ala His Lys Glu Leu Ser Lys Glu Ile 250 Lys Arg Leu Lys Gly Leu Leu Thr Gln His Gly Ile Pro Tyr Thr Arg Pro Thr Glu Thr Ser Asn Leu Glu His Leu Gly His Glu Thr Pro Arg 280 Ala Lys Ser Pro Glu Gln Leu Arg Gly Asp Pro Gly Leu Arg Gly Ser

Leu 305

<210> 1199 <211> 127 <212> PRT <213> Homo sapiens <220> <221> SITE

<222> (127)

<223> Xaa equals any amino acid

<400> 1199

Met Phe Val Leu Leu Tyr Val Thr Ser Phe Ala Ile Cys Ala Ser Gly
1 5 10 15

Gln Pro Arg Gly Asn Gln Leu Lys Gly Glu Asn Tyr Ser Pro Arg Tyr 20 25 30

Ile Cys Ser Ile Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Ala 35 40 45

Asn Gly Ser Pro Gly Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp 50 55 60

Gly Arg Asp Gly Arg Lys Gly Glu Lys Gly Glu Lys Gly Thr Ala Gly 65 70 75 80

Leu Arg Gly Lys Thr Gly Pro Leu Gly Leu Ala Gly Glu Lys Gly Asp 85 90 95

Gln Gly Glu Thr Gly Lys Lys Gly Pro Ile Gly Pro Glu Gly Glu Lys 100 105 110

Gly Glu Val Gly Pro Ile Gly Pro Pro Gly Pro Lys Gly Asp Xaa 115 120 125

<210> 1200

<211> 142

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (92)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (136)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (138)

<223> Xaa equals any amino acid

<400> 1200

Met Cys Ala Phe Pro Trp Leu Leu Leu Leu Leu Leu Gln Glu Gly
1 5 10 15

Ser Gln Arg Arg Leu Trp Arg Trp Cys Gly Ser Glu Glu Val Val Ala 20 25 30

Val Leu Gln Glu Ser Ile Ser Leu Pro Leu Glu Ile Pro Pro Asp Glu
35 40 45

Glu Val Glu Asn Ile Ile Trp Ser Ser His Lys Ser Leu Ala Thr Val

50 55 60

Val Pro Gly Lys Glu Gly His Pro Ala Thr Ile Met Val Thr Asn Pro 65 70 75 80

His Tyr Gln Gly Gln Val Ser Phe Leu Asp Pro Xaa Tyr Ser Leu His 85 90 95

Ile Ser Asn Leu Ser Trp Glu Asp Ser Gly Leu Tyr Gln Ala Gln Val 100 105 110

Asn Leu Arg Thr Ser Gln Ile Ser Thr Met Gln Gln Tyr Asn Leu Cys 115 120 125

Val Tyr Arg Trp Leu Ser Glu Xaa Pro Xaa His Cys Glu Leu 130 135 140

<210> 1201

<211> 122

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (92)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (100)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (109)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (116)

<223> Xaa equals any amino acid

<400> 1201

Met Leu Ala Leu Thr Leu Ala Lys Ala Asp Ser Pro Arg Thr Ala Leu 1 5 10 15

Leu Cys Ser Ala Trp Leu Leu Thr Ala Ser Phe Ser Ala Gln Gln His 20 25 30

Lys Gly Ser Leu Gln Val His Gln Thr Leu Ser Val Glu Met Asp Gln 35 40 45

Val Leu Lys Ala Leu Ser Phe Pro Lys Lys Lys Ala Ala Leu Leu Ser 50 55 60

Thr Ala Ile Leu Cys Phe Leu Arg Thr Ala Leu Arg Gln Ser Phe Ser 65 70 75 80

Ser Ala Trp Asn Pro Gly Ala Leu Lys Gly Pro Xaa Thr Ala Ala Thr

85 90 95

Lys Asp Thr Xaa Leu Thr Ser Leu Arg Met Ser Lys Xaa Gly Pro Gly 100 105 110

His Trp Ala Xaa Lys Thr Ser Trp Cys Lys 115 120

<210> 1202

<211> 216

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (18)

<223> Xaa equals any amino acid'

<400> 1202

Cys Phe Pro Trp Gly Xaa Ala Leu Arg Gln Lys Leu Phe Pro Ser Ala 1 5 10 15

Leu Xaa Ala Leu Val Pro Ser Gly Ala Gln Pro Leu Pro Ala Thr Lys 20 25 30

Asp Thr Val Leu Ala Pro Leu Arg Met Ser Gln Val Arg Ser Leu Val
35 40 45

Ile Gly Leu Gln Asn Leu Leu Val Gln Lys Asp Pro Leu Leu Ser Gln 50 55 60

Ala Cys Val Gly Cys Leu Glu Ala Leu Leu Asp Tyr Leu Asp Ala Arg 65 70 75 80

Ser Pro Asp Ile Ala Leu His Val Ala Ser Gln Pro Trp Asn Arg Phe 85 90 95

Leu Leu Phe Thr Leu Leu Asp Ala Gly Glu Asn Ser Phe Leu Arg Pro 100 105 110

Glu Ile Leu Arg Leu Met Thr Leu Phe Met Arg Tyr Arg Ser Ser Ser 115 120 125

Val Leu Ser His Glu Glu Val Gly Asp Val Leu Gln Gly Val Ala Leu 130 135 140

Ala Asp Leu Ser Thr Leu Ser Asn Thr Thr Leu Gln Ala Leu His Gly 145 150 155 160

Phe Phe Gln Gln Leu Gln Ser Met Gly His Leu Ala Asp His Ser Met 165 170 175

Ala Gln Thr Leu Gln Ala Ser Leu Glu Gly Leu Pro Pro Ser Thr Ser 180 185 190

Ser Gly Gln Pro Pro Leu Gln Asp Met Leu Cys Leu Gly Gly Val Ala 195 200 205

Val Ser Leu Ser His Ile Arg Asn 210 215

<210> 1203

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1203

Met Leu Pro Leu Leu Ile Ile Cys Leu Leu Pro Ala Ile Glu Gly Lys

1 5 10 15

Asn Cys Leu Arg Cys Trp Pro Glu Leu Ser Ala Leu Ile Asp Tyr Asp 20 25 30

Leu Gln Ile Leu Trp Val Thr Pro Gly Pro Pro Thr Glu Leu Ser Gln
35 40 45

Ser Ile His Ser Leu Phe Leu Glu Asp Asn Asn Phe Leu Lys Pro Trp 50 55 60

Tyr Leu Asp Arg Asp His Leu Glu Glu Glu Thr Ala Lys Phe Phe Thr 65 70 75 80

Gln Val His Gln Ala Ile Lys Thr Leu Arg Asp Asp Lys Thr Val Leu 85 90 95

Leu Glu Glu Ile Tyr Thr His Lys Asn Leu Phe Thr Glu Arg Leu Asn 100 105 110

Lys Ile Ser Asp Gly Leu Lys Glu Lys Glu Pro His Pro Ser Pro 115 120 125

<210> 1204

<211> 164

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (126)

<223> Xaa equals any amino acid

<400> 1204

Met Leu Pro Leu Leu Ile Ile Cys Leu Leu Pro Ala Ile Glu Gly Lys

1 10 15

Asn Cys Leu Arg Cys Trp Pro Glu Leu Ser Ala Leu Ile Asp Tyr Asp 20 25 30

Leu Gln Ile Leu Trp Val Thr Pro Gly Pro Pro Thr Glu Leu Ser Gln 35 40 45

Ser Ile His Ser Leu Phe Leu Glu Asp Asn Asn Phe Leu Lys Pro Trp 50 55 60

Tyr Leu Asp Arg Asp His Leu Glu Glu Glu Thr Ala Lys Phe Phe Thr 65 70 75 80

Gln Val His Gln Ala Ile Lys Thr Leu Arg Asp Asp Lys Thr Val Leu 85 90 95

Leu Glu Glu Ile Tyr Thr His Lys Asn Leu Phe Thr Glu Arg Leu Asn 100 105 110

Lys Ile Ser Asp Gly Leu Lys Glu Lys Gly Ala Pro Pro Xaa Ser Met 115 120 125

Asn Ala Phe Pro Ala Pro Ser Pro Thr Cys Thr Pro Glu Pro Leu Gly 130 135 140

Ser Val Cys Leu Pro Ser Thr Ser Val Ser Leu Pro Ser His Leu Pro 145 150 155 160

Gly Ser Leu Gln

<210> 1205

<211> 77

<212> PRT

<213> Homo sapiens

<400> 1205

Met Ala Leu Lys Asn Lys Phe Ser Cys Leu Trp Ile Leu Gly Leu Cys 1 5 10 15

Leu Val Ala Thr Thr Ser Ser Lys Ile Pro Ser Ile Thr Asp Pro His 20 25 30

Phe Ile Asp Asn Cys Ile Glu Ala His Asn Glu Trp Arg Gly Lys Val 35 40 45

Asn Pro Pro Ala Ala Asp Met Lys Tyr Met Ile Trp Asp Lys Gly Leu 50 55 60

Ala Lys Met Ala Lys Ala Trp Gly Lys Pro Val Gln Ile
65 70 75

<210> 1206

<211> 257

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (27)

<223> Xaa equals any amino acid

<400> 1206

Met Thr Ala Ala Val Phe Phe Gly Cys Ala Phe Ile Ala Phe Gly Pro

15 1 10 Ala Leu Ala Leu Tyr Val Phe Thr Ile Ala Xaa Glu Pro Leu Arg Ile Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser Leu Leu Ile Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile Asp Asn Lys Asp Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly Ala Phe Val Ser Val Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr Tyr Lys Leu Leu Lys Lys Ala Ser Glu Gly Leu Lys Ser Ile Asn Pro Gly Glu Thr Ala Pro Ser 105 Met Arg Leu Leu Ala Tyr Val Ser Gly Leu Gly Phe Gly Ile Met Ser Gly Val Phe Ser Phe Val Asn Thr Leu Ser Asp Ser Leu Gly Pro Gly 135 Thr Val Gly Ile His Gly Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala 155 Phe Met Thr Leu Val Ile Ile Leu Leu His Val Phe Trp Gly Ile Val Phe Phe Asp Gly Cys Glu Lys Lys Trp Gly Ile Leu Leu Ile Val Leu Leu Thr His Leu Leu Val Ser Ala Gln Thr Phe Ile Ser Ser Tyr Tyr Gly Ile Asn Leu Ala Ser Ala Phe Ile Ile Leu Val Leu Met Gly 215 210 Thr Trp Ala Phe Leu Ala Ala Gly Gly Ser Cys Arg Ser Leu Lys Leu Cys Leu Leu Cys Gln Asp Lys Asn Phe Leu Leu Tyr Asn Gln Arg Ser 245

Arg

<210> 1207

<211> 94

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any amino acid

<400> 1207 Arg Xaa Pro Ile Phe Ile Gly Glu Asn Phe Tyr Pro Pro Val Arg Gly Arg Val Gly Met Ser Ala Cys Gln Gly Val Asp Lys Leu Pro Cys Leu Thr Met Cys Trp Cys Gly Asn Gly Ala Gln Pro Ala Arg Leu Lys Val Asp Gly Ile Pro Thr Gly Gln Arg Lys Ser Tyr Ala Asp Thr Pro Ala Trp Pro Gly 85 <210> 1208 <211> 82 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (26) <223> Xaa equals any amino acid <220> <221> SITE <222> (28) <223> Xaa equals any amino acid <400> 1208 Pro Gly Asn Glu Val Thr Asp Gly Gln Pro Arg Gln Pro Leu Arg Arg Leu Arg Leu Pro Cys Gly Ala Ser Leu Xaa Arg Xaa Pro Ala Ser Pro Ser Asp Ala Ile Gln Arg Ala Leu Pro Gly Arg Lys Leu Pro Arg Trp Asn Ala Ser Pro Glu Gln Arg Val Ala Val Pro Cys Gly Gly Leu Thr Gln Trp Leu Asn Thr Gly Lys Glu Leu Ala Leu Gly Val Arg Thr Ser

Glu Thr

<210> 1209 <211> 60 <212> PRT

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<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (17)
<223> Xaa equals any amino acid
<400> 1209
Asn Leu Xaa Cys Cys Glu Pro Leu Lys Gly Thr Glu Ile Val His Leu
Xaa Ser Ser Asp Phe Lys Ala Val Ala Cys Arg Cys Ser Gln Leu Asn
Lys Ala Leu Pro Ser Thr Thr Leu Arg Gly Phe Val Cys Gly Ser Ser
                             40
Cys Tyr Ile Ser Trp Phe Pro Asn Gln Glu Thr Arg
                         55
<210> 1210
<211> 113
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (42)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (50)
<223> Xaa equals any amino acid
<220>
<221> SITE
<222> (110)
<223> Xaa equals any amino acid
<400> 1210
Met Pro Arg Cys Arg Trp Leu Ser Leu Ile Leu Leu Thr Ile Pro Leu
Ala Leu Val Ala Arg Lys Asp Pro Lys Lys Asn Glu Thr Gly Val Leu
Arg Lys Leu Lys Pro Val Asn Ala Phe Xaa Cys Gln Arg Gly Ser Ser
                             40
Val Xaa Gly Phe Ala Met Gln Glu Tyr Asn Lys Glu Ser Glu Asp Lys
Tyr Val Phe Leu Val Val Lys Thr Leu Gln Ala Gln Leu Gln Val Thr
```

65 70 75 80

Asn Leu Leu Glu Tyr Leu Ile Asp Val Glu Ile Ala Arg Ser Asp Cys
85 90 95

Arg Lys Pro Leu Ser Thr Asn Glu Ile Ala Pro Phe Lys Xaa Thr Pro 100 105 110

Ser

<210> 1211

<211> 38

<212> PRT

<213> Homo sapiens

<400> 1211

Met Val Ser Lys His Ser Leu Asn Leu His Phe Phe Tyr Trp Lys Gly
1 5 10 15

Gly Cys Ala Cys Phe Thr Ser Glu Pro Arg Val Phe Val Val Glu 20 25 30

Leu Ser Leu Leu Asp Cys 35

<210> 1212

<21:1> 64

<212> PRT

<213> Homo sapiens

<400> 1212

Arg Thr Leu Arg Met Ser Pro Ser Ala Phe Cys Tyr Ser Leu Thr Leu 1 5 10 15

Leu Ala Cys Trp Arg Ala Ala Trp Ile Pro Thr Cys Val Pro Arg Ala 20 25 30

Ala Gly Glu Met Asp Ser Pro Gly Leu Ala Asp Gly His Trp Cys Ser 35 40 45

Gly Ala Ala Arg Arg Ser Pro His Tyr Val Ala Arg Ser Leu Val Leu 50 60

<210> 1213

<211> 170

<212> PRT

<213> Homo sapiens

<400> 1213

Met Ile Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg

1 5 10 15

Val Ala Asn Glu Leu Asn Ala Arg Arg Arg Ser Phe Thr Asp Phe Asp 20 25 30

Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val Gln Cys 35 40 45

Val Leu Ala Phe Thr Gly Val Ala Gly Tyr Ile Thr Tyr Leu Ser Ile 50 60 .

Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val Leu Thr 65 70 75 80

Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg His Gln 85 90 95

Ser Thr Glu Gly Met Ser Ile Lys Met Val Leu Met Trp Thr Ser Gly 100 105 110

Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro Leu Gln 115 120 125

Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala Ile Leu 130 135 140

Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala Pro His 145 150 155 160

Ala Val His Pro Thr Gly Thr Lys Ala Leu 165 170

<210> 1214

<211> 170

<212> PRT

<213> Homo sapiens

<400> 1214

Met Ile Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg 1 5 10 15

Val Ala Asn Glu Leu Asn Ala Arg Arg Arg Ser Phe Thr Asp Phe Asp
20 25 30

Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val Gln Cys 35 40 45

Val Leu Ala Phe Thr Gly Val Ala Gly Tyr Ile Thr Tyr Leu Ser Ile 50 60

Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val Leu Thr 65 70 75 80

Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg His Gln
85 90 95

Ser Thr Glu Gly Met Ser Ile Lys Met Val Leu Met Trp Thr Ser Gly
100 105 110

Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro Leu Gln

115 120 125

Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala Ile Leu 130 135 140

Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala Pro His 145 150 155 160

Ala Val His Pro Thr Gly Thr Lys Ala Leu 165 170

<210> 1215

<211> 61

<212> PRT

<213> Homo sapiens

<400> 1215

Met Asn Ala Ser Leu Ile Ser Trp Val Leu Val Leu His Arg Ile Cys

1 10 15

Leu Gly Leu Ser Asp Ile Pro Lys Glu Asn Cys Ile Ile Thr Ile Ser 20 25 30

Gly Met Gln Leu Ser His His Gly Gln Ser Leu Gly Lys Trp Ala Glu 35 40 45

Lys Leu His Val Phe Tyr Ser Leu Phe Ser Phe Leu Leu 50 55 60

<210> 1216

<211> 322

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any amino acid

<400> 1216

Arg Ala Pro Arg Arg Thr Gly Pro Ala Ser Phe Ser Ser Arg Pro Ala 1 5 10 15

Gly Thr Cys Ser Asp Asn Arg Val Thr Ser Phe Xaa Asp Leu Ile His  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Asp Gln Asp Glu Asp Glu Glu Glu Glu Glu Gly Gln Arg Phe Tyr Ala
35 40 45

Gly Gly Ser Glu Arg Ser Gly Gln Gln Ile Val Gly Pro Pro Arg Lys
50 55 60

Lys Ser Pro Asn Glu Leu Val Asp Asp Leu Phe Lys Gly Ala Lys Glu 65 70 75 80

His Gly Ala Val Ala Val Glu Arg Val Thr Lys Ser Pro Gly Glu Thr  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ser Lys Pro Arg Pro Phe Ala Gly Gly Gly Tyr Arg Leu Gly Ala Ala 105 Pro Glu Glu Glu Ser Ala Tyr Val Ala Gly Glu Lys Arg Gln His Ser 120 Ser Gln Asp Val His Val Val Leu Lys Leu Trp Lys Ser Gly Phe Ser Leu Asp Asn Gly Glu Leu Arg Ser Tyr Gln Asp Pro Ser Asn Ala Gln Phe Leu Glu Ser Ile Arg Arg Gly Glu Val Pro Ala Glu Leu Arg Arg Leu Ala His Gly Gly Gln Val Asn Leu Asp Met Glu Asp His Arg Asp 185 Glu Asp Phe Val Lys Pro Lys Gly Ala Phe Lys Ala Phe Thr Gly Glu 200 Gly Gln Lys Leu Gly Ser Thr Ala Pro Gln Val Leu Ser Thr Ser Ser 215 Pro Ala Gln Gln Ala Glu Asn Glu Ala Lys Ala Ser Ser Ser Ile Leu Ile Asp Glu Ser Glu Pro Thr Thr Asn Ile Gln Ile Arg Leu Ala Asp 245 250 Gly Gly Arg Leu Val Gln Lys Phe Asn His Ser His Arg Ile Ser Asp Ile Arg Leu Phe Ile Val Asp Ala Arg Pro Ala Met Ala Ala Thr Ser 280 Phe Ile Leu Met Thr Thr Phe Pro Asn Lys Glu Leu Ala Asp Glu Ser 295 Gln Thr Leu Lys Glu Ala Asn Leu Leu Asn Ala Val Ile Val Gln Arg 315 310 Leu Thr

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<210> 1217 <211> 13

<212> PRT

<213> Homo sapiens

<400> 1217

Ser Cys Ile Ser Trp Val Phe Val Met Ile Asn Gly Leu 1 5 10

<210> 1218 <211> 362

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (307)

<223> Xaa equals any amino acid

<400> 1218

Met Arg Thr Leu Phe Asn Leu Leu Trp Leu Ala Leu Ala Cys Ser Pro 1 5 10 15

Val His Thr Thr Leu Ser Lys Ser Asp Ala Lys Lys Ala Ala Ser Lys
20 25 30

Thr Leu Leu Glu Lys Ser Gln Phe Ser Asp Lys Pro Val Gln Asp Arg
35 40 45

Gly Leu Val Val Thr Asp Leu Lys Ala Glu Ser Val Val Leu Glu His 50 55 60

Arg Ser Tyr Cys Ser Ala Lys Ala Arg Asp Arg His Phe Ala Gly Asp 65 70 75 80

Val Leu Gly Tyr Val Thr Pro Trp Asn Ser His Gly Tyr Asp Val Thr 85 90 95

Lys Val Phe Gly Ser Lys Phe Thr Gln Ile Ser Pro Val Trp Leu Gln 100 105 110

Leu Lys Arg Arg Gly Arg Glu Met Phe Glu Val Thr Gly Leu His Asp \$115\$ \$120\$ \$125\$

Val Asp Gln Gly Trp Met Arg Ala Val Arg Lys His Ala Lys Gly Leu 130 135 140

His Ile Val Pro Arg Leu Leu Phe Glu Asp Trp Thr Tyr Asp Asp Phe 145 150 155 160

Arg Asn Val Leu Asp Ser Glu Asp Glu Ile Glu Glu Leu Ser Lys Thr 165 170 175

Val Val Gln Val Ala Lys Asn Gln His Phe Asp Gly Phe Val Val Glu 180 185 190

Val Trp Asn Gln Leu Leu Ser Gln Lys Arg Val Thr Asp Gln Leu Gly
195 200 · 205

Met Phe Thr His Lys Glu Phe Glu Gln Leu Ala Pro Val Leu Asp Gly 210 215 220

Phe Ser Leu Met Thr Tyr Asp Tyr Ser Thr Ala His Gln Pro Gly Pro 225 230 . 235 240

Asn Ala Pro Leu Ser Trp Val Arg Ala Cys Val Gln Val Leu Asp Pro 245 250 255

Lys Ser Lys Trp Arg Ser Lys Ile Leu Leu Gly Leu Asn Phe Tyr Gly 260 265 270

Met Asp Tyr Ala Thr Ser Lys Asp Ala Arg Glu Pro Val Val Gly Ala

275 280 285

Arg Tyr Ile Gln Thr Leu Lys Asp His Arg Pro Arg Met Val Trp Asp 290 295 300

Ser Gln Xaa Ser Glu His Phe Phe Glu Tyr Lys Lys Ser Arg Ser Gly 305 310 315 320

Arg His Val Val Phe Tyr Pro Thr Leu Lys Ser Leu Gln Val Arg Leu 325 330 335

Glu Leu Ala Arg Glu Leu Gly Val Gly Val Ser Ile Trp Glu Leu Gly 340 345 350

Gln Gly Leu Asp Tyr Phe Tyr Asp Leu Leu 355 360

<210> 1219

<211> 415

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (338)

<223> Xaa equals any amino acid

<400> 1219

Met Arg Thr Leu Phe Asn Leu Leu Trp Leu Ala Leu Ala Cys Ser Pro 1 5 10 15

Val His Thr Thr Leu Ser Lys Ser Asp Ala Lys Lys Ala Ala Ser Lys

Thr Leu Leu Glu Lys Ser Gln Phe Ser Asp Lys Pro Val Gln Asp Arg
35 40 45

Gly Leu Val Val Thr Asp Leu Lys Ala Glu Ser Val Val Leu Glu His 50 55 60

Arg Ser Tyr Cys Ser Ala Lys Ala Arg Asp Arg His Phe Ala Gly Asp 65 70 75 80

Val Leu Gly Tyr Val Thr Pro Trp Asn Ser His Gly Tyr Asp Val Thr 85 90 95

Lys Val Phe Gly Ser Lys Phe Thr Gln Ile Ser Pro Val Trp Leu Gln 100 105 110

Leu Lys Arg Arg Gly Arg Glu Met Phe Glu Val Thr Gly Leu His Asp 115 120 125

Val Asp Gln Gly Trp Met Arg Ala Val Arg Lys His Ala Lys Gly Leu 130 135 140

His Ile Val Pro Arg Leu Leu Phe Glu Asp Trp Thr Tyr Asp Asp Phe 145 150 155 160

Arg Asn Val Leu Asp Ser Glu Asp Glu Ile Glu Glu Leu Ser Lys Thr

170 175 165 Val Val Gln Val Ala Lys Asn Gln His Phe Asp Gly Phe Val Val Glu 185 Val Trp Asn Gln Leu Leu Ser Gln Lys Arg Val Gly Leu Ile His Met Leu Thr His Leu Ala Glu Ala Leu His Gln Ala Arg Leu Leu Ala Leu 215 Leu Val Ile Pro Pro Ala Ile Thr Pro Gly Thr Asp Gln Leu Gly Met Phe Thr His Lys Glu Phe Glu Gln Leu Ala Pro Val Leu Asp Gly Phe 250 Ser Leu Met Thr Tyr Asp Tyr Ser Thr Ala His Gln Pro Gly Pro Asn 265 Ala Pro Leu Ser Trp Val Arg Ala Cys Val Gln Val Leu Asp Pro Lys 280 Ser Lys Trp Arg Ser Lys Ile Leu Leu Gly Leu Asn Phe Tyr Gly Met Asp Tyr Ala Thr Ser Lys Asp Ala Arg Glu Pro Val Val Gly Ala Arg 310 315 Tyr Ile Gln Thr Leu Lys Asp His Arg Pro Arg Met Val Trp Asp Ser 325 Gln Xaa Ser Glu His Phe Phe Glu Tyr Lys Lys Ser Arg Ser Gly Arg His Val Val Phe Tyr Pro Thr Leu Lys Ser Leu Gln Val Arg Leu Glu Leu Ala Arg Glu Leu Gly Val Gly Val Ser Ile Trp Glu Leu Ala Arg 375 Ala Trp Thr Thr Ser Thr Thr Cys Ser Arg Trp Ala Leu Arg Pro Pro 395 Arg Trp Thr Cys Ser Phe Leu Ser His Gly Val Ser Glu Gln Val 405

<210> 1220

<211> 71

<212> PRT

<213> Homo sapiens

<400> 1220

Met Val Gln Gly Pro Leu Thr His Leu Met Leu Val Leu Leu Ile Ser 1 5 10 15

Leu Ile Phe Leu Ser Arg Gly Ser Gly Arg Ala Trp Ala Phe Ser His  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Ser Cys Phe Lys Thr Ser Asp Leu Leu Pro Cys Arg Asn Arg Trp Glu 35 40 45

Val Ile Glu Phe Leu His Tyr Ser Asn Leu His Ser His Ile Ser Leu 50 55 60

Ser Val Thr Lys Thr Phe Leu

<210> 1221

<211> 140

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (136)

<223> Xaa equals any amino acid

<400> 1221

Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu Leu 1 5 10 15

Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp Lys Thr 20 25 30

Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly Phe Ser Lys  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly Ile Thr Gln Cys  $50 \hspace{1cm} 55 \hspace{1cm} 60$ 

Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala Asp Ile Gln Ala Ala 65 70 75 80

Gln Ala Met Met Val Thr Ser Ser Ala Ile Ser Ser Leu Ala Cys Ile 85 90 95

Ile Ser Val Val Gly Met Arg Cys Thr Val Phe Cys Gln Glu Ser Arg 100 105 110

Ala Lys Asp Arg Val Ala Val Ala Gly Gly Val Phe Phe Ile Leu Gly 115 120 125

Ser Leu Leu Gly Phe Ile Pro Xaa Ala Trp Asn Leu 130 135 140

<210> 1222

<211> 86

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any amino acid

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<220>
<221> SITE
<222> (43)
<223> Xaa equals any amino acid
<400> 1222
Arg Arg Phe Tyr Ser Pro Leu Val Pro Asp Ser Met Lys Phe Glu Ile
Gly Glu Ala Leu Tyr Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile
Xaa Gly Ile Ile Leu Cys Phe Ser Cys Ser Xaa Gln Arg Asn Arg Ser
Asn Tyr Tyr Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser
     50
                         55
Pro Arg Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr
Ser Leu Thr Gly Tyr Val
                 85
<210> 1223
<211> 42
<212> PRT
<213> Homo sapiens
<400> 1223
Met Phe Leu Phe Ile Thr Phe Thr Ile Leu Ala Ile Phe Ile Ile Glu
Pro Arg Asn Leu Arg Val Asp Leu Asn Leu Ile Lys Phe Gln Thr Ser
Trp Pro Lys Thr Leu Val Glu Glu Gln Asn
         35
<210> 1224
<211> 76
<212> PRT
<213> Homo sapiens
<400> 1224
Ile Asn Phe Thr Tyr Lys Arg Leu Ser Leu Asp Phe Ile Tyr Ile Tyr
                                    10
Met Cys Val Tyr
Leu Lys Arg Thr Cys Ala Ser Ile Lys Gly Asn Lys Met Arg Glu Tyr
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Ile Ile Asp Phe Val Lys Ser Lys Tyr Leu Asn Tyr Gly Phe Ser Ile

Phe Lys Asn Ser Cys Ser Phe Cys Thr Tyr Phe Phe 65 70 75

<210> 1225

<211> 54

<212> PRT

<213> Homo sapiens

<400> 1225

Met Cys Trp Ile Cys Val Trp Leu Phe Phe Ser Pro Thr Lys Thr Ser 1 5 10 15

Cys Phe Pro Trp Leu Ile Arg Pro Gly Pro Arg Ser Phe Thr Asp Ser 20 25 30

His Gly Thr Pro Pro Trp Gln Cys Leu Glu Pro Ser Ser Phe Thr Tyr 35 40 45

Pro Gly Lys Gln Val Trp
50

<210> 1226

<211> 145

<212> PRT

<213> Homo sapiens

<400> 1226

Met Ser Gln Ala Trp Val Pro Gly Leu Ala Pro Thr Leu Leu Phe Ser 1 5 10 15

Leu Leu Ala Gly Pro Gln Lys Ile Ala Ala Lys Cys Gly Leu Ile Leu
20 25 30

Ala Cys Pro Lys Gly Phe Lys Cys Cys Gly Asp Ser Cys Cys Gl<br/>n Glu 35 40 45

Asn Glu Leu Phe Pro Gly Pro Val Arg Ile Phe Val Ile Ile Phe Leu  $50 \hspace{1cm} 55 \hspace{1cm} 60 \hspace{1cm}$ 

Val Ile Leu Ser Val Phe Cys Ile Cys Gly Leu Ala Lys Cys Phe Cys 65 70 75 80

Arg Asn Cys Arg Glu Pro Glu Pro Asp Ser Pro Val Asp Cys Arg Gly  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Pro Leu Glu Leu Pro Ser Ile Ile Pro Pro Glu Arg Val Ile Leu Lys 100 105 110

Pro Ser Leu Gly Pro Thr Pro Thr Glu Pro Pro Pro Tyr Ser Phe 115 120 125

Arg Pro Glu Glu Tyr Thr Gly Asp Gln Arg Gly Ile Asp Asn Pro Ala 130 135 140

Phe

145

<210> 1227 <211> 142 <212> PRT

<213> Homo sapiens

<400> 1227

Met Arg Arg Leu Leu Leu Val Thr Ser Leu Val Val Leu Leu Trp
1 5 10 15

Glu Ala Gly Ala Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val 20 25 30

Lys His Trp Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg 35 40 45

Val Val Glu Pro Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro 50 55 60

Val Gln Lys Pro Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Thr 65 70 75 80

Lys Ala Trp Met Glu Thr Glu Asp Thr Leu Gly Arg Val Leu Ser Pro  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro Pro Glu Glu Asp Gln 100 105 110

Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro Asn His Gln Val Leu 115 120 125

Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr His Pro Gln 130 140

<210> 1228

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1228

Met Arg Arg Leu Leu Leu Val Thr Ser Leu Val Val Val Leu Leu Trp

1 5 10 15

Glu Ala Gly Ala Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val 20 25 30

Lys His Trp Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg
35 40 45

Val Val Glu Pro Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro
50 60

Val Gln Lys Pro Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Thr 65 70 75 80

Lys Ala Trp Met Glu Thr Glu Asp Thr Leu Gly Arg Val Leu Ser Pro 85 90 95

Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro Pro Glu Glu Asp Gln 100 105 110

Gly Glu Glu Arg Pro Arg Leu 115

<210> 1229

<211> 462

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (115)

<223> Xaa equals any amino acid

<400> 1229

Met Arg Leu Arg Val Arg Leu Leu Lys Arg Thr Trp Pro Leu Glu Val 1 5 10 15

Pro Glu Thr Glu Pro Thr Leu Gly His Leu Arg Ser His Leu Arg Gln
20 25 30

Ser Leu Leu Cys Thr Trp Gly Tyr Ser Ser Asn Thr Arg Phe Thr Ile 35 40 45

Thr Leu Asn Tyr Lys Asp Pro Leu Thr Gly Asp Glu Glu Thr Leu Ala 50 55 60

Ser Tyr Gly Ile Val Ser Gly Asp Leu Ile Cys Leu Ile Leu Gln Asp 65 70 75 80

Asp Ile Pro Ala Pro Asn Ile Pro Ser Ser Thr Asp Ser Glu His Ser 85 90 95

Ser Leu Gln Asn Asn Glu Gln Pro Ser Leu Ala Thr Ser Ser Asn Gln 100 105 110

Thr Ser Xaa Gln Asp Glu Gln Pro Ser Asp Ser Phe Gln Gly Gln Ala 115 120 125

Ala Gln Ser Gly Val Trp Asn Asp Asp Ser Met Leu Gly Pro Ser Gln 130 135 140

Asn Phe Glu Ala Glu Ser Ile Gln Asp Asn Ala His Met Ala Glu Gly 145 150 155 160

Thr Gly Phe Tyr Pro Ser Glu Pro Met Leu Cys Ser Glu Ser Val Glu
165 170 175

Gly Gln Val Pro His Ser Leu Glu Thr Leu Tyr Gln Ser Ala Asp Cys
180 185 190

Ser Asp Ala Asn Asp Ala Leu Ile Val Leu Ile His Leu Leu Met Leu 195 200 205

Glu Ser Gly Tyr Ile Pro Gln Gly Thr Glu Ala Lys Ala Leu Ser Met 210 215 220

Pro Glu Lys Trp Lys Leu Ser Gly Val Tyr Lys Leu Gln Tyr Met His 230 235 Pro Leu Cys Glu Gly Ser Ser Ala Thr Leu Thr Cys Val Pro Leu Gly Asn Leu Ile Val Val Asn Ala Leu Asn Leu Pro Asp Val Phe Gly Leu Val Val Leu Pro Leu Glu Leu Lys Leu Arg Ile Phe Arg Leu Leu Asp Val Arg Ser Val Leu Ser Leu Ser Ala Val Cys Arg Asp Leu Phe Thr Ala Ser Asn Asp Pro Leu Leu Trp Arg Phe Leu Tyr Leu Arg Asp Phe 310 315 Arg Asp Asn Thr Val Arg Val Gln Asp Thr Asp Trp Lys Glu Leu Tyr Arg Lys Arg His Ile Gln Arg Lys Glu Ser Pro Lys Gly Arg Phe Val Met Leu Pro Ser Ser Thr His Thr Ile Pro Phe Tyr Pro Asn Pro 360 Leu His Pro Arg Pro Phe Pro Ser Ser Arg Leu Pro Pro Gly Ile Ile 375 Gly Gly Glu Tyr Asp Gln Arg Pro Thr Leu Pro Tyr Val Gly Asp Pro Ile Ser Ser Leu Ile Pro Gly Pro Gly Glu Thr Pro Ser Gln Phe Pro Pro Leu Arg Pro Arg Phe Asp Pro Val Gly Pro Leu Pro Gly Pro Asn Pro Ile Leu Pro Gly Arg Gly Gly Pro Asn Asp Arg Phe Pro Phe Arg 440 Pro Ser Arg Gly Arg Pro Thr Asp Gly Arg Leu Ser Phe Met 455

<210> 1230

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1230

Met Phe Val Pro Ser Cys Leu Cys Leu Arg Phe Val Val Thr Ser Leu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Leu Leu Gln Met Thr His Ser Cys Gly Gly Phe Tyr Ile Cys Val Ile 20 25 30

Phe Glu Thr Ile Leu Ser Glu Phe Lys Thr Gln Ile Gly Arg Leu Tyr 35 40 45

Arg Lys Arg His Ile Gln Arg Lys Glu Ser Pro Lys Gly Arg Phe Val 50 60

Met Leu Leu Pro Ser Ser Thr His Thr Ile Pro Phe Tyr Pro Asn Pro 65 70 75 80

Leu His Pro Arg Pro Phe Pro Ser Ser Arg Leu Pro Pro Gly Ile Ile 85 90 95

Gly Gly Glu Tyr Asp Gln Arg Pro Thr Leu Pro Tyr Val Gly Asp Pro
100 105 110

Ile Ser Ser Leu Ile Pro Gly Pro Gly Glu Thr Pro Ser Gln Phe Pro
115 120 125

Pro Leu Arg Pro Arg Phe Asp Pro Val Gly Pro Leu Pro Gly Pro Asn 130 135 140

Pro Ile Leu Pro Gly Arg Gly Gly Pro Asn Asp Arg Phe Pro Phe Arg 145 150 155 160

Pro Ser Arg Gly Arg Pro Thr Asp Gly Arg Leu Ser Phe Met 165 170

<210> 1231

<211> 164

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (76)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (112)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (146)

<223> Xaa equals any amino acid

<400> 1231

Met Arg Thr Leu Val Glu Leu Gly Pro Trp Ala Gly Asp Phe Gly Pro 1 5 10 15

Asp Leu Leu Chr Leu Leu Phe Leu Leu Phe Leu Ala His Gly Val 20 25 30

Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe 35 40 45

Leu Met Ala Glu Gln Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala 50 60

Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Xaa Arg Leu Cys Trp

65 70 75 80

Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln 85 90 95

Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Xaa 100 105 110

Glu Ala Ala Cys Thr Phe Cys Phe His Leu Thr Leu Leu His Leu Arg 115 120 125

His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr 130 135 140

Val Xaa Ala Tyr Thr Ala Gly Pro Tyr Val Cys Phe Phe Asn Pro Ala 145 150 155 160

Leu Ala Ala Leu

<210> 1232

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1232

Met Val Thr Phe Ile Asn Ala Thr Leu Trp Ile Ala Val Phe Ser Tyr 1 5 10 15

Ile Met Val Trp Leu Val Thr Ile Ile Gly Tyr Thr Leu Gly Ile Pro 20 25 30

Asp Val Ile Met Gly Ile Thr Phe Leu Ala Ala Gly Gln Val Phe Gln

Thr Ala Trp Pro Ala 50

<210> 1233

<211> 169

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (39)

<223> Xaa equals any amino acid

<220>

<221> SITE

<222> (44)

<223> Xaa equals any amino acid

PCT/US02/08277

WO 03/038063 <220> <221> SITE <222> (71) <400> 1233

<223> Xaa equals any amino acid

Met Val Thr Phe Ile Xaa Ala Thr Leu Trp Ile Ala Val Phe Ser Tyr

Ile Met Val Trp Leu Val Thr Ile Ile Gly Tyr Thr Leu Gly Ile Pro

Asp Val Ile Met Gly Ile Xaa Phe Leu Ala Ala Xaa Thr Ser Val Pro

Asp Cys Met Ala Ser Leu Ile Val Ala Arg Gln Gly Leu Gly Asp Met

Ala Val Ser Asn Thr Ile Xaa Ser Asn Val Phe Asp Ile Leu Val Gly

Leu Gly Val Pro Trp Gly Leu Gln Thr Met Val Val Asn Tyr Gly Ser 90

Thr Val Lys Ile Asn Ser Arg Gly Leu Val Tyr Ser Val Val Leu Leu

Leu Gly Ser Val Ala Leu Thr Val Leu Gly Ile His Leu Asn Lys Trp 120

Arg Leu Asp Arg Lys Leu Gly Val Tyr Val Leu Val Leu Tyr Ala Ile

Phe Leu Cys Phe Ser Ile Met Ile Glu Phe Asn Val Phe Thr Phe Val 155

Asn Leu Pro Met Cys Arg Glu Asp Asp 165

<210> 1234

<211> 187

<212> PRT

<213> Homo sapiens

<400> 1234

Met Val Ala Ala Thr Val Ala Ala Ala Trp Leu Leu Trp Ala Ala

Ala Cys Ala Gln Gln Glu Gln Asp Phe Tyr Asp Phe Lys Ala Val Asn 25

Ile Arg Gly Lys Leu Val Ser Leu Glu Lys Tyr Arg Gly Ser Val Ser

Leu Val Val Asn Val Ala Ser Glu Cys Gly Phe Thr Asp Gln His Tyr

Arg Ala Leu Gln Gln Leu Gln Arg Asp Leu Gly Pro His His Phe Asn

65 70 75 80

Val Leu Ala Phe Pro Cys Asn Gln Phe Gly Gln Gln Glu Pro Asp Ser 85 90 95

Asn Lys Glu Ile Glu Ser Phe Ala Arg Arg Thr Tyr Ser Val Ser Phe 100 105 110

Pro Met Phe Ser Lys Ile Ala Val Thr Gly Thr Gly Ala His Pro Ala 115 120 125

Phe Lys Tyr Leu Ala Gln Thr Ser Gly Lys Glu Pro Thr Trp Asn Phe 130 135 140

Trp Lys Tyr Leu Val Ala Pro Asp Gly Lys Val Val Gly Ala Trp Asp 145 150 155 160

Pro Thr Val Ser Val Glu Glu Val Arg Pro Gln Ile Thr Ala Leu Val 165 170 175

Arg Lys Leu Ile Leu Leu Lys Arg Glu Asp Leu 180 185

<210> 1235

<211> 105

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (69)

<223> Xaa equals any amino acid

<400> 1235

Met Ser Gly Leu Ala Ala Ala Ala His Val Phe Arg Val Cys Leu Phe 1 5 10 15

Pro Leu Ser Trp Gly Ser Ser Lys Thr Thr Phe Ile His Gly Leu Ser 20 25 30

Ser Tyr Ile Ala Thr Pro Val Leu Asn Ser Ile Phe Ser Ser Trp Lys  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ser Arg Arg Lys Asp Thr Trp Thr Cys Leu Leu His Arg Leu Ser Ala 50 60

Phe Pro Ile Ser Xaa Arg Arg Arg Asn Phe Ala Leu Phe Ser His Ser 65 70 75 80

Cys Val Cys Ile Arg Ser Ser Ser Asp Asp Val Gly Pro Thr Met Tyr 85 90 95

Ser Phe Ser Val Pro Cys Arg Val Lys 100 105

<210> 1236

<211> 61

<212> PRT

<213> Homo sapiens

<400> 1236

Met Gly Ser Phe Leu His Pro Gln Trp His Leu Leu Ile Thr Phe Cys
1 5 10 15

Ala Val Leu Gly Lys Gly Leu His Ser Asp Pro Ser Arg Pro Phe Glu 20 25 30

His Gly Gly Ala Leu Gly Lys Val Pro Arg Gly Arg Ser Thr Leu Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Ser Lys Glu Val Leu Leu Lys Lys Lys Lys Lys Lys Arg 50 55 60

<210> 1237

<211> 102

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (70)

<223> Xaa equals any amino acid

<400> 1237

Met Met Ile Ser Ile Val Gly Phe Leu Ser Pro Phe Asn Met Ile Leu 1 5 10 15

Gly Gly Ile Val Val Leu Val Phe Thr Gly Phe Val Trp Ala Ala 20 25 30

His Asn Lys Asp Val Leu Arg Arg Met Lys Lys Arg Tyr Pro Thr Thr 35 40 45

Phe Val Met Val Val Met Leu Ala Ser Tyr Phe Leu Ile Ser Met Phe 50 55 60

Gly Gly Val Met Val Xaa Val Phe Gly Ile Thr Phe Pro Leu Leu 65 70 75 80

Met Phe Ile His Ala Ser Leu Arg Leu Arg Asn Leu Lys Asn Lys Leu 85 90 95

Glu Asn Lys Met Glu Gly 100

<210> 1238

<211> 188

<212> PRT

<213> Homo sapiens

<400> 1238

Met Asp Val Asn Ile Ala Pro Leu Arg Ala Trp Asp Asp Phe Pro 1 5 10 15

Gly Ser Asp Arg Phe Ala Arg Pro Asp Phe Arg Asp Ile Ser Lys Trp
20 25 30

Asn Asn Arg Val Val Ser Asn Leu Leu Tyr Tyr Gln Thr Asn Tyr Leu 35 40 45

Val Val Ala Ala Met Met Ile Ser Ile Val Gly Phe Leu Ser Pro Phe 50 55 60

Asn Met Ile Leu Gly Gly Ile Val Val Leu Val Phe Thr Gly Phe 65 70 75 80

Val Trp Ala Ala His Asn Lys Asp Val Leu Arg Arg Met Lys Lys Arg 85 90 95

Tyr Pro Thr Thr Phe Val Met Val Met Leu Ala Ser Tyr Phe Leu
100 105 110

Ile Ser Met Phe Gly Gly Val Met Val Phe Val Phe Gly Ile Thr Phe
115 120 125

Pro Leu Leu Met Phe Ile His Ala Ser Leu Arg Leu Arg Asn Leu 130 135 140

Lys Asn Lys Leu Glu Asn Lys Met Glu Gly Ile Gly Leu Lys Arg Thr 145 150 155 160

Pro Met Gly Ile Val Leu Asp Ala Leu Glu Gln Gln Glu Gly Ile 165 170 175

Asn Arg Leu Thr Asp Tyr Ile Ser Lys Val Lys Glu 180 185

<210> 1239

<211> 310

<212> PRT

<213> Homo sapiens

<400> 1239

Met Ala Leu Arg Arg Pro Pro Arg Leu Arg Leu Cys Ala Arg Leu Pro 1 5 10

Asp Phe Phe Leu Leu Leu Phe Arg Gly Cys Leu Ile Gly Ala Val 20 25 30

Asn Leu Lys Ser Ser Asn Arg Thr Pro Val Val Gln Glu Phe Glu Ser 35 40 45

Val Glu Leu Ser Cys Ile Ile Thr Asp Ser Gln Thr Ser Asp Pro Arg
50 55 60

Ile Glu Trp Lys Lys Ile Gln Asp Glu Gln Thr Thr Tyr Val Phe Phe 65 70 75 80

Asp Asn Lys Ile Gln Gly Asp Leu Ala Gly Arg Ala Glu Ile Leu Gly
85
90
95

Lys Thr Ser Leu Lys Ile Trp Asn Val Thr Arg Arg Asp Ser Ala Leu 100 105 110

Tyr Arg Cys Glu Val Val Ala Arg Asn Asp Arg Lys Glu Ile Asp Glu 115 120 125

Ile Val Ile Glu Leu Thr Val Gln Val Lys Pro Val Thr Pro Val Cys 130 135 140

Arg Val Pro Lys Ala Val Pro Val Gly Lys Met Ala Thr Leu His Cys 145 150 155 160

Gln Glu Ser Glu Gly His Pro Arg Pro His Tyr Ser Trp Tyr Arg Asn 165 170 175

Asp Val Pro Leu Pro Thr Asp Ser Arg Ala Asn Pro Arg Phe Arg Asn 180 185 190

Ser Ser Phe His Leu Asn Ser Glu Thr Gly Thr Leu Val Phe Thr Ala 195 200 205

Val His Lys Asp Asp Ser Gly Gln Tyr Tyr Cys Ile Ala Ser Asn Asp 210 215 220

Ala Gly Ser Ala Arg Cys Glu Glu Glu Met Glu Val Tyr Asp Leu 225 230 235 240

Asn Ile Gly Gly Ile Ile Gly Gly Val Leu Val Val Leu Ala Val Leu 245 250 255

Ala Leu Ile Thr Leu Gly Ile Cys Cys Ala Tyr Arg Arg Gly Tyr Phe 260 265 270

Ile Asn Asn Lys Gln Asp Gly Glu Ser Tyr Lys Asn Pro Gly Lys Pro
275 280 285

Asp Gly Val Asn Tyr Ile Arg Thr Asp Glu Glu Gly Asp Phe Arg His 290 295 300

Lys Ser Ser Phe Val Ile

<210> 1240

<211> 310

<212> PRT

<213> Homo sapiens

<400> 1240

Met Ala Leu Arg Arg Pro Pro Arg Leu Arg Leu Cys Ala Arg Leu Pro 1 10 15

Asp Phe Phe Leu Leu Leu Phe Arg Gly Cys Leu Ile Gly Ala Val 20 25 30

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